HOME SAFETY *Review*

Vol. 14, No. 9 - November 1957

PROPER VENTILATION COULD SAVE YOUR LIFE!

See Story Page 4.

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The Home Safety Conference is the meeting point for representatives of national organizations conducting programs that include prevention of accidents in the home. It officially represents National Safety Council home safety service subscriber-members. Conference officers (with the exception of the staff secretary) serve voluntarily without pay as the council's safety officers and planning board for home safety program.

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HOME SAFETY REVIEW

A Magazine for Home Safety Program Leaders

VOL. 14 **NO. 9**

NOVEMBER 1957

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The HOME SAFETY REVIEW is published monthly (except July and August) by the National Safety Council, 425 North Michigan Avenue, Chicago 11, Ill. **Copyright 1957 by the National Safety Council.** **Printed in U.S.A. Price $.25 per copy, subscription $2.25 per year.**
Statements and opinions advanced in signed articles are personal expressions of the authors, not necessarily those of the National Safety Council.

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Guest Editorial*

For other Christmas safety program aids, see pages 11 and 12.

A Year-Round Christmas

I FEEL QUITE strongly that the true spirit of safety is a "Christmas" spirit; that a really fervent desire to be of some help in the field of accident prevention must partake to a certain extent of the Christmas warmth of good-fellowship; that the sympathy, understanding, tolerance, and love for our friends and families must have, in addition, a protective attitude that is constantly alert to the ways in which we help them avoid the suffering and loss, the grief and heartache, that a careless act or a thoughtless moment may bring about.

Safety *is* a prosaic thing. Accident prevention *can* be considered in the cold and calculating light of economic loss, but we would all be lost in our attempt to keep down the accident toll if there were no inspirational satisfaction in what we do. If there were no "soul satisfying" elements to this work we are doing, if you do not have a deep-seated conviction that you are helping others without being do-gooders, there would be mighty few of you helping to prevent accidents.

Realizing that "Home is where the heart is" and that yours can never be a "Home, Sweet Home" unless it is a Home Safe Home, this Christmas and every day of the year to come, keep the thought in your minds and the feeling in your hearts that the peace and warmth of home should never be disturbed by the cold hurt and suffering of an accident.

Make it a "Year 'Round Christmas" by carrying this spirit into all your interests and associations for the year to come. Be sure that every day — not just one day — you can truly feel that you are satisfying the feeling of "good will toward men." Keep this attitude in your hearts, so that every day you can look at your friends with the wish that they will have a "Merry Christmas" and a happy and accident-free New Year.

—Vernon W. Hale
Manager
Greater Grand Rapids Safety Council
Grand Rapids, Mich.

*This guest editorial is part of a talk prepared as a "safety sermon" which was given originally at a meeting of the Home Safety Division of the Greater Grand Rapids Safety Council, Grand Rapids, Mich., last December and which, Mr. Hale suggested, might be of interest in the N.S.C. church program.

YOUR HOME,
Is It Fire Safe?

By John C. Thornton

Chairman, Committee on Human Safety, A.I.A.
Royal Oak, Mich.

IF YOUR HOME is fire resistant, it does not mean that it is firesafe! There is always fuel present, and burning materials can produce gases deadly enough to cause death if precautions are not taken. More people are killed by the gases of combustion (smoke) than by the flames themselves.

Of the 6,500 deaths from fire annually, 5,500 occur in the home, the most for any one type of occupancy.

What can be done in the design of a new home to make it safer for the occupants if fire should come? What changes can be made in an older home?

Proper ventilation can be a life saver in the prevention of death from the deadly gases of combustion; so can the proper shutting off of ventilation. Here are some tips on where to provide ventilation and where not to.

Since there have been many cases of death where the gases from a fire smothered sleepers without awakening them, it is advisable where possible to have the bedroom section of a home separated from the rest of the house by a door which should always be closed at night, and it would be better to open the window also. If there is an attached garage, make it a habit to keep the door to the living quarters closed at all times; the garage should be vented. Because in a split-level home it is not wise to have an open stairway from the basement to the second floor, there should be a door at the head of the basement stairs which is to be kept closed.

A window in the basement with a fusible link so designed that it will fall out in case of fire may keep the deadly gases from rising into the rest of the house.

More people are killed by the gases of combustion (smoke) than by the flames themselves.

Also check the chimney for cracks to prevent flue gas from escaping into the house and to see that no wood touches the chimney since this is a fire hazard. Air is the best insulation.

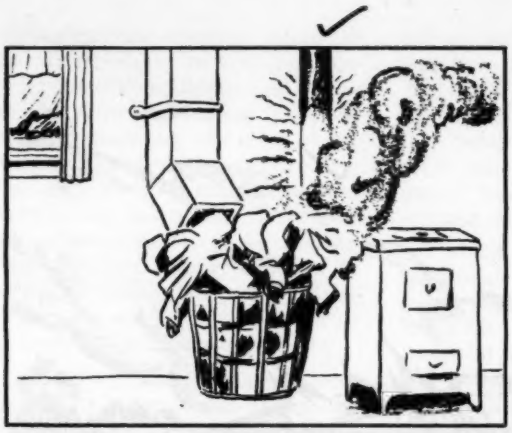
Since all fuel burning appliances need air, be sure that plenty of fresh air is available for your heating plant and other fuel burning equipment to prevent incomplete combustion with the resultant hazard of carbon monoxide fumes.

Proper ventilation is not the only problem, of course, in the prevention of death by fire. It's better to prevent the fire itself by removing or building out fire hazards.

For instance, although we have been warned not to leave a television set on when we leave the room, we should also know that a built-in set without adequate ventilation is a serious fire hazard because of the heat generated in operation.

It was reported in 1955 in *Fire News* published by the National Fire Protection Association that two of the three sleeping occupants of a second story apartment in Cohoes, N. Y., were asphyxiated by fire that originated at a TV set in the dining room. It was concluded by investigators that the converter on top of the TV set had been left on after the occupants went to bed which caused the converter to overheat and ignite the TV set. The flames that spread to other furnishings generated gases that asphyxiated the two occupants sleeping in an adjoining bedroom. A third occupant in a bedroom in the rear of the house was rescued by firemen summoned at 4:30 a.m.

Another fire hazard to watch out for is the type of fiberboard or plywood used as a building material in your house. There are plywoods that withstand fire very well, but others delaminate rapidly under heat and



See that clothes descending the chute do not land on a hot smoke pipe.

furnish fast burning fuel for the fire. Fiberboards and plywoods that burn rapidly can be painted with a fire retardant paint which will cut down the fire spread materially. However, a fire retardant paint does not protect the unpainted side if ignition takes place there. Partitions that do not go to the ceiling cause fire to spread more rapidly.

One of the reasons that fires spread so rapidly in homes is that they are built without fire stopping. Thus flames are allowed to get into walls and partitions and reach all portions of the dwelling rapidly. Wherever a pipe or duct rises from the basement, the space around it should be closed with fire retardant material in which there are no openings.

Because the clothes chute is another danger spot which has helped spread many fires, the space around the chute should be fire stopped and should have metal, self-closing doors at the openings above. If there is the usual latticed box at the base of the chute to collect clothes, this makes kindling for a fire just where you do not want it. See that clothes descending the chute do not land on a hot smoke pipe. This has happened!

In *Fire News* it was reported in 1954, for instance, that a fire in a dwelling in Mattoon, Ill., started apparently when clothing, which had been dropped down the laundry chute, landed on a furnace smoke pipe instead of falling into a basket behind the furnace. The fire spread up the combustible laundry chute to the upper stories, and three children were burned to death.

Incinerators have caused many fires, too. The screen on the chimney must be checked often for the best of them last but a few years.

A good fire alarm system in the home may save lives because it will wake you before it is too late. We refer to a system with approved detectors and a large gong, not the kind the many high-pressure salesmen are foisting on the public. Why not invest a few dollars so that you may live to enjoy your kitchen gadgets that cost considerably more?

The best fire protection for a basement is a few sprinklers on the city water system or a private pump and pressure tank. The point to remember is that there must not be more sprinklers than the water system will supply.

Have you ever thought what you would do if you were cut off from exit through the house in a fire?

One of the first rules of fire safety is to provide two means of escape. You should be able to escape through a window. The high, small windows in some modern so-called ranch-type houses are too small for escape. They are not adequate unless they are at least 18 inches in the least dimension, and, if they are high, they may be in the smoke zone where a person cannot survive long enough to escape. In every bedroom, if there is not an outside door, there should be at least one window (large enough for escape) which has a low sill. Screens and storm windows should be so designed that they cannot be pushed out by a young child but can be easily removed by adults or older children.

It is a safety measure to locate appliances out of the line of travel to an exit. A heating plant in a closet off the hall and windows through which there is no escape spell tragedy in case there is a fire. A basement exit directly to the outdoors is commendable, and if there is a recreation room, such an exit is doubly desirable, nor should one have to pass a basement heating plant.

Closets under stairs often invite storage of combustibles where, in case of fire, escape from the second floor can be cut off.

All of the items we have mentioned cannot be incorporated in an older home, but some of the precautions can be taken in any home and in purchasing a new dwelling. It is wise to look the building over carefully and ask yourself, "Is this a firesafe home?"

Would you be able to escape through a window?

THIS?
The high, small windows are too small for escape.

OR THIS?
There should be at least one window (large enough for escape) which has a low sill.

TWO MAJOR CAMPAIGNS

By Percy Bugbee

General Manager
National Fire Protection Association
Boston, Mass.

MOST FIRES in buildings occur in dwellings, and a substantial number of the deaths and injuries from fires also are to women and children in the home. We had close to 500,000 fires in dwellings last year.

Major causes of home fires, resulting in deaths and injuries include: combustibles (including clothing, rubbish, and flammable fluids) stored near furnaces, heaters, stoves, etc.; smokers falling asleep in bed and carelessness; people who kindle fires with gasoline and kerosene; defective heating and cooking equipment; children playing with matches and other combustibles; defective or overloaded electric wires and appliances; and defective or overheated chimneys, vents, and stove pipes.

Other principal causes of these deaths and injuries are people trapped in bedrooms, usually on the second floor, children left alone in the house and people re-entering burning homes to rescue pets or valuables.

The purpose of this article is to describe some of the major campaigns that are now being undertaken to reduce these tragedies. There are two major nationwide campaigns that are presently going on that are of real importance and value in the field of home fire prevention. The first of these is the home inspection program presently being fostered by the International Association of Fire Chiefs. I can best describe how this plan operates by telling about one of the first of the larger cities that instituted such a program quite a number of years ago. This was Providence, R. I. Providence at that time had some 77,000 homes, and the chief of the fire department decided that using all of his manpower over a period of some 6 to 8 weeks he could make a simple inspection of these homes. Prior to the start of the inspection, the chief appealed to the newspapers of Providence for their support, and the papers played up the story in advance that all of the homes in Providence were to be visited by uniformed firemen in pairs for the purpose of rendering a special service to reduce deaths and fires in the city.

One of the most interesting aspects of this campaign was that the municipal incinerator found that, before the inspection even started, a tremendous deluge of all sorts of rubbish descended upon them. In other words, the good housewives of Providence were not going to let the firemen see their cluttered up attics and basements and closets, and they cleaned up in advance.

One of the most amazing incidents out of this campaign, I recall, was the fact that the campaign was undertaken in the fall of the year, and several hundred Christmas trees were found in basements of dwellings left there from Christmas of the year before. You can imagine what ripe tinder these were for any stray spark!

In New England, as elsewhere, the theory that a man's home is his castle still prevails. The Providence Fire Department was uneasy as to the reception that they might get, but they found when they started this inspection program that they were refused admittance in less than one-half of one percent of the homes in the city. This inspection program brought about a marked reduction in the number of dwelling fires in Providence, but there were also some handsome dividends from the program that the Providence Fire Department did not anticipate. Shortly after the program was finished Providence needed a bond issue for fire department improvements. It was overwhelmingly voted because the people recognized that the fire department was working in their interest.

The dwelling inspection program and procedure are catching on

throughout the country. Many of our larger cities, such as Los Angeles, New York, Boston and Philadelphia, are undertaking home inspection programs, and many of our very small communities with purely volunteer fire departments are also carrying on this activity. Wherever it has been undertaken, the dwelling losses show a decline, and one of the nicest features about this activity is that it is accomplished at no extra expense to the taxpayers.

In order to put some special push behind this campaign, during the past year the Fire Prevention Committee of the International Association of Fire Chiefs appealed to the governors of the 48 states for support, and already in 22 states the governor has sponsored a special fire prevention meeting to which the fire chiefs of the state have been invited to listen to an explanation of the home inspection program.

There are some 20,000 communities in the United States that have some sort of a fire department. The time will come when every one of these communities carries through a home inspection program as a matter of course, and when that takes place, the deaths and injuries and losses in dwelling fires will be very substantially reduced.

The other major, nationwide, yearround, educational program directed at homeowners is the Sparky Fire Prevention Campaign sponsored by the National Fire Protection Association. Sparky, the firehouse Dalmatian dog, has become a symbol of fire prevention through his frequent appearances on radio and television, on billboards and car cards, and in newspapers and magazines throughout the country.

Thousands upon thousands of children have enrolled, and in several hundred communities throughout the country the local fire department has sponsored a "Sparky Fire Department" for the children with great success. From the outset of Sparky's fire department operations, reports from children and parents have satisfied the NFPA that this project is definitely an effective and positive way to reach children with the fire prevention message. Under pressure from 8 to 9 year olds, parents have stopped smoking in bed. People who weren't sure what constituted over-fusing have had this fact pointed out in no uncertain terms along with lectures on improper wiring and prompt removal of trash and rubbish.

Through this Sparky program, the individual is being reminded constantly of the very simple things that he needs to know to reduce the danger of fire in his own home. We believe that the Sparky campaign is the largest mass educational effort in fire prevention ever conducted.

There are a few other developments in the field of home fire protection and fire prevention that should be commented upon. Through the good work of the Commission on Safety Education of the National Education Association, some excellent material for all grades in the schools has been developed so that the teachers can inculcate fire prevention education in existing courses in domestic science, art, civics, English, and the like. A large proportion of the school children today are getting the fundamentals of fire safety as a part of their education.

Because of the present day prevalence of employment of many married women, there has been a large number of fire incidents caused by children left unattended in homes. The NFPA is carrying on a special program in this field, and a kit of instructional material on a campaign to eliminate this hazard of unattended children is available for the asking. Many fire departments are conducting special courses and providing special material for babysitters, and these programs are also effective.

A major source of fires in dwellings has been the portable oil heater. Here again the NFPA has undertaken a special campaign to eliminate this hazard. The attention of the manufacturers has been focused on improvements in design of these heaters, and numerous fire departments have undertaken special inspection campaigns to educate all of the people in the community as to the hazard of unsafe and improperly maintained portable heaters.

Another source of severe fire hazard in dwellings was the use of highly combustible fiberboard as partitions. The NFPA made representations to the manufacturers of this fiberboard, and the manufacturers are presently treating the exposed side of all of this type of building board with a fire retardant coating. This goes a long way to eliminate the fire hazard from the use of this type of building material.

The trends described above are providing a healthy and desirable improvement in the field of home fire prevention. As they grow and develop, it appears likely to us that a substantial reduction in deaths and injuries and fires in dwellings will ensue.

A major home inspection program is being fostered by the Int. Association of Fire Chiefs.

THE NEED FOR RESEARCH in Home Accident Prevention

By Albert P. Iskrant
Chief, Operational Research
Accident Prevention Program
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Dept. of Health, Education, and Welfare
Washington, D. C.

IT* IS GENERALLY agreed that research into the causation of accidental injuries is one of the most vital needs in public health today. We talk about the ninety thousand odd deaths from accidents each year; the increasing proportion of deaths that are due to accidents; the fact that from age 1 to 35 accidents are the leading cause of death. We talk about the "epidemiological approach," about "accident proneness," about emotional factors, accounting for 80 per cent of accidents, about the medical aspects of accident prevention. We talk of the 28,000 deaths, the 800,000 lost man years of life, the 4,000,000 injuries and the almost a billion dollars cost resulting from home accidents.

We recognize in a vague kind of way that the home accident is the leading cause of death of young children, and so we talk of slippery rugs and insecure ladders, and we decide to do a survey. We organize the community, do a survey, and, in many cases, it is forgotten before the results are known. Now, there is nothing wrong with a survey; it has been an excellent method for determining the extent and nature of the problem. All praise is due to the W. K. Kellogg Foundation, the National Safety Council, and the health departments and others that struggled so manfully in uncharted waters. Also the work of the National Office of Vital Statistics and the vital statistics bureaus of the 14 states that cooperated in the preparation of special forms for data on deaths from home accidents—all this deserves mention. Much invaluable data are contained in the report of this cooperative effort.

But this is not what John Gordon meant when he said that the epidemiological approach was equally applicable to injuries and disease. It was not what Dr. Shattuck meant when he said it was "more important (to know) what kind of a fellow has an accident than what kind of an accident the fellow has." It was not what Dr. Chapman meant when he said that further decreases in injury and death due to accidents could not reasonably be expected without the institution of epidemiological research to determine causation.

If we wish to apply to home accidents the same epidemiological methods we used in combating the communicable diseases, we shall have to extend our efforts beyond the "survey." Tabulations regarding the who, when, and where of home accident injuries and deaths help to identify problem areas and the need for control measures, but they *do not* provide solutions or identify causal relationships.

We must acknowledge that much research has been done in the field of home accidents, especially about children. In poisoning, in particular, a great deal of practical knowledge has been obtained. And the subjects of "accident proneness" and the personality traits of accident repeaters have been dealt with widely, though sporadically. But the findings don't "hang together," and there is no organized research going on that can be expected to come to fruition within a definite time.

It seems that, in spite of the repeated declarations that we must apply to home accidental injuries the same epidemiological techniques that we used in determining the etiology and control measures for communicable diseases, we have not gone past the stage of the survey. If we really believe that home accident injuries, disabilities, and deaths constitute the health problem we say they are and that we need to know more about the circumstances surrounding them in order to develop preventive efforts, then it is high time we started a research program commensurate with the problem.

The immediate goal of a research program for home accidental injury prevention, or any accidental injury prevention, is to identify the basic causes, in the hope that elimination or modification of the causative factors will reduce accident frequency and/or severity with a resultant saving in human life and the diminution of disability. Because my experience is in the field of public health, I shall rely largely upon the epidemiological approach in outlining a proposal for a research program.

Ordinarily we consider epidemiological studies as being concerned with the host (person who has the accident), agent (physical, chemical, or biologic), and the environment (physical, biologic, or socioeconomic), and their interaction. Hypotheses developed from studies should be tested by the most stringent statistical tests possible and through controlled experiments whenever feasible.

It is suggested that the team approach be used in epidemiological studies in order to bring to bear on the investigations the maximum talent available and to exploit to the fullest the opportunities presented. Physicians, engineers, nurses, psychologists, investigators, and the like can all contribute. The composition of a particular team, in addition to a statistician and clerical help, would depend upon the type of investigation. Investigation of poisoning of children may take different talents from an investigation of falls from ladders of young-adult men.

The subject of "accident proneness" should be explored. To date the term has been used to describe a series of personality traits which have not as yet been identified. Scattered studies have identified various traits which sometimes appear to be the

*This is a talk presented by Mr. Iskrant at a symposium entitled "The Need for Research in Home Accident Prevention" at the 45th National Safety Congress, October 23, 1957, in Chicago, Ill.

product of the author's imagination, or his pet belief, or else traits which can be found in most people. Characteristics which are suggested by epidemiological studies should be subjected to the most vigorous tests under controlled conditions.

Apart from any inherent "accident proneness" which may exist in individuals, it is believed that attitudes develop because of the effect of social or environmental forces on human behavior and safety. Workers who are extremely careful on the job may be careless around the house. A person cautious around the house may drive like a lunatic.

While many authors feel that the key to the solution of the accident problem lies in this area, virtually nothing is known, although much is speculated. There is great need for the development and use of methods of assessing attitudes, to identify those which predispose to unsafe behavior, and to develop methods of modifying or changing attitudes and behavior. Parenthetically, I might remark that this last item is no small task.

A particular problem in home accidents concerns older people, among whom more than half of the deaths from home accidents (and most of the deaths from falls) occur. We must find out how to convince older persons they are not as young as they used to be and how to modify their behavior pattern for greater safety. Very young children must be protected against accidents, but older children, especially those attending school, must be instructed in safe behavior. More needs to be known about children's conceptions of and attitudes toward accidents at each stage of their development, so that realistic safety instruction can be planned for different age groups.

There appears to be general agreement that organic disease, impaired functions, and aging processes increase the accident potential of individuals, but their effect on actual accident occurrence is, at present, largely speculative. The extent to which these persons "compensate" for their deficiencies is not known, and differences in exposure make comparisons difficult. When we find greater than expected prevalence of specific conditions among those having had accidents, we must then compare the accident experience of a group of persons having the condition and a control group without the condition, matched on age, exposure, and whatever other variables are recognizable.

Because of the difficulty of selecting appropriate groups with particular conditions or defects and of following their accident experience, it may be more appropriate to give physical examinations to entire groups of persons and then do followup for accident experience. In this way many hypotheses could be tested in the same group of persons. Another approach would be through the records of an organization which provides routine medical care and physical examinations, where both the physical condition of participants and also all accidental injury experience needing medical attention would be known. The prior or future incidence of accidental injuries in persons with particular defects or conditions can be compared with a control group. If the organization enrolls families, additional studies can be done on family accidental injury experience.

In considering the relationship of physical condition to accidents, the stage of growth and development of children and its effect on their activities and urges seem to offer a very fertile field for study and the development of realistic safety education for children of different ages.

This is perhaps an appropriate time to mention the term "secondary prevention," which in the health field is used to designate measures taken to minimize disability and death after the illness or infection occurs. To a large extent the first aid and medical care given to injured persons is an important factor in determining whether the injury results in recovery, permanent disability, or death. It is generally agreed that accident victims who are not killed immediately have the best chance of recovery if they receive early and adequate first aid. Proper training in first aid seems important, but, at present, little is known about methods of teaching or their effectiveness. Present methods of teaching and administering first aid must be studied to be sure that first aid manuals include latest medical information. In like manner medical treatment of injuries must be continuously appraised and evaluated.

It would seem obvious that the types of accidents people have are, in large part, a function of the hazards to which they are exposed, which hazards in turn are a function of peoples' way of living. Socioeconomic and cultural patterns help to determine the types of accidents that people have. Children who accidentally ingest aspirin come from families where aspirin is accepted, probably in childhood medical care. Poisoning from kerosene ingestion obviously occurs in a different cultural pattern from poisoning from tranquilizers and barbiturates. There needs to be definitive research into various cultural patterns and ways to motivate them to safer conduct.

Epidemiological research in the field of home accidental injuries cannot be limited to the identification of susceptible individuals, nor can hazards be removed from the environment after identification except through the process of making them less susceptible. The role of the environment in its relation to the host must be studied, not only for accidents in general, but for specific accidents. The contribution of various environmental factors to causation of specific types of accidents may, indeed, offer more immediate control measures than the identification of "accident prone" personal characteristics.

My personal opinion is that, for both the environment and the agent (I have difficulty in distinguishing between these in home accidents), research which identifies causes of specific types of accidents will produce "pay dirt" most quickly. For example, changing door locks on refrigerators, or removing doors from abandoned refrigerators, may be more immediately profitable than attempting to modify childhood be-

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—Photos on this page by Twin Cities Area Safety Council

Two winners of top awards in the Twin Cities Area Safety Council's Firearm Safety Shoot are shown the winning targets by Marshall Nelson, JayCee project chairman, Harry Hatcher, director of the council, St. Joseph, Mich., and Dave Gates, educational advisor, Daisy Mfg. Co., Plymouth, Mich.

A FIREARM SAFETY SHOOT

MORE THAN 100 boys and girls, aged 8 to 15, turned out for the 1-day Firearm Safety Shoot sponsored by the Twin Cities Area Safety Council last April. The firearm safety program was staged in St. Joseph, Mich., in cooperation with the Twin Cities Junior Chamber of Commerce and Daisy Manufacturing Co., Plymouth, Mich.

Standard National Rifle Association targets were used, and 17 youngsters, using 15-foot ranges, shot at the same time. Prizes were awarded to the winners in each age bracket.

Daisy Manufacturing furnished the targets, guns, and ammunition; the JayCees furnished the manpower. The Twin Cities Area Safety Council furnished the background and technical advice and showed a movie *On Target for Safety.*

"Within 6 weeks in March and April," pointed out Harry Hatcher, director of the Twin Cities Area Safety Council,"6 youngsters under 12 were injured in this area in firearm accidents. We hope with this shoot and a continuing program of firearm safety we can keep that from happening."

Harry Hatcher helped establish, when he was with the Omaha Safety Council, a nationally famous Firearm Safety Shoot in Omaha, Nebr., which now attracts shooters annually from four states. The movie *On Target for Safety* was made of the Omaha Safety Council's program by the Daisy Manufacturing Co.

Below: It doesn't pay to "monkey" around with a firearm. Sammy, the 2-year-old trained chimpanzee, was the featured attraction at the Firearm Safety Shoot in St. Joseph, Mich., sponsored by the Twin Cities Area Safety Council, the JayCees, and the Daisy Mfg. Co.

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Above: JayCees and fathers give adult supervision and safety instruction to the youngsters on the firing line in the Firearm Safety Shoot.

PTA Solves Christmas Meeting Problem

THE WOODRUFF SCHOOL Parent-Teacher Association, Logan, Utah, solved the problem of transmitting information about safety from the PTA meeting to the home by instigating a home safety evening last December to take the place of the regular PTA meeting. Mrs. George LeRoy Nelson, president of the Woodruff School PTA, states in her 1956 Home Safety Inventory report:

"As parents in P.T.A. perhaps we live too busy lives to really take the time to teach our children all we should about safety. We may go to meetings ourselves, but the information we receive may not be transmitted to our family so that they understand and practice it.

"From these ideas grew our home safety evening. . . ."

The PTA sent home a letter (see illustration) the early part of December 1956 requesting parents to stay home from the regular PTA meeting December 12 and hold a special family PTA home evening and Christmas social.

With the letter they sent home suggested topics concerning a theme for the evening "Safety at Christmas Time and Throughout the New Year" for the family to use to make reports, write poems, invent and take part in skits, play quiz games, etc. This was entitled "Accidents Don't Just Happen. They are Caused!" and contained the following topic suggestions:

"1. Selection of safe and educational toys.

"2. Keep Christmas trees safe from fire and falling.

"3. Common winter hazards caused by snow and ice.

"4. Acquaint yourself with, and observe, safety traffic rules.

"5. Fire prevention at home.

"6. Danger from medicines and poisons.

"7. Caution with animals.

"8. Safety in play.

"9. School bus and car safety.

"10. Home safety rules."

In order to determine how many families followed through with this they also enclosed with the letter a questionnaire as follows which was to be checked and returned to school immediately following the December 12th PTA home meeting.

"Please check and Return to School Immediately Following Your December 12th P.T.A. Home Meeting.

Yes	No	
☐	☐	We held our home P.T.A. meeting.
☐	☐	We used safety material.
☐	☐	We also had a Christmas program by our family.
☐	☐	We had refreshments.

Number of people present _____.

Signed _____"

Mrs. Nelson states in the Inventory report ". . . Our P.T.A. membership comes from approximately 258 families, our report came back that 157 families held home evenings and 564 people attended. Most of these 564 people participated on the program. Through research, demonstrations, memorizing, etc., the members of each family surely became more aware of what they could do to practice safety habits. . . ."

Woodruff School
December 5, 1956

Dear Parents,

In behalf of the Woodruff P.T.A., we wish you a most joyous Merry Christmas and a Safe and Happy New Year.

This year we are trying a new idea that we are sure you will welcome with enthusiastic response. Rather than take you away from your family another night of this busy month, we are asking you to stay home from the regular P.T.A. meeting of December 12, and hold a special family P.T.A. home evening and Christmas social.

A good and timely subject for your special evening would be Safety At Christmas Time And Throughout The New Year. We are enclosing several topics concerning this theme which will provide abundant material for your family to use in reports, poems, skits, quiz games, etc.

To complete your family evening of fun with a Christmas spirit, let your children sing carols and present yulstide poems and stories. It is always such a happy experience to plan and work together as a family.

We wish you the same success and enjoyment in your home evening as we are anticipating having in ours.

Invitationally yours,

Mrs. LeRoy Nelson, Pres.
Mrs. William Ewer, Vice Pres.
Mrs. Weldon Kofoed, Program Ch.
Mrs. Marshall Rainey, Safety Ch.
Mr. Henry R. Cooper, Principal

Right: This letter was sent to members of the Woodruff School PTA, Logan, Utah, last December.

Safety at Christmas

Mrs. Arthur N. Struble

Director, Nursing Services
Mahoning Chapter, American Red Cross
and
Member, School and Home Safety Committee
Safety Council of Greater Youngstown
Youngstown, Ohio

The Safety Council of Greater Youngstown published this poem as a safe toys for Christmas project.

"'TWAS THE NIGHT before Christmas and all through the house
Not a creature was stirring—
not even a mouse."
A gay Christmas tree, decked in
tinsel bright,
Sent its gay glitter far out in
the night.
The mantel was brilliant with
holly and berry,
And chubby Santas made the
scene merry.
The stockings were filled and hung
by the grate,
A large one for Bill, and small one
for Kate.
Gayly wrapped boxes under the tree
Gave promise of joys on the
morrow to be.
Toys had been chosen and purchased
with care,
For parents applied safety rules there.

For baby, who's in the hand-to-
mouth stage,
A bright colored rattle, a book
with cloth page,
A squeaky cat with a whistle
embedded—
A safety precaution to which
Mother's indebted.
Blocks with round corners will prove
a safe toy
To give to the baby, a big
bouncing boy.
Push-and-pull toys with round
handles and string,
Made safe with nonpoisonous paint,
will bring
Happy hours to the lad who pulls
them with glee
As round the room, a truck driver
is he.
A soft, stuffed dog with bright
felt eyes
Mid boxes beneath the Christmas
tree lies.

Then Santa remembered the
youngster, age 3,
Because in the explorative age
she will be.
For this child a sand box, shovel,
and spoon
Will serve for a trip as far as
the moon.
Wooden animal, tricycle, wagon,
and cars
Will carry imaginative Mary
to Mars.
Watch for rough edges on all of
these toys
To keep traveler safe, e'en though
making a noise.

The "let's pretend age," for tots
3 to 4,
Brings strangely wrapped packages
galore.
A small broom, carpet sweeper,
a toy telephone
Help them pretend the playroom
is home.
Small garden tools, doll buggies,
and dishes,
As play Mother and Father carry
out their wishes,
The toys must be light for the
child to use
If electrical, make sure they'll not
blow a fuse.
Dad chose toys, well made from
the start,
Which wouldn't break, splinter,
or come apart.

To the child, 4 to 6, comes
thought of school,
So educational aids are a
welcome tool.
Blackboard, dustless chalk, paint
books, and clay
Fill idle hours with well planned
play.
Blunt nose scissors, washers, small
houses, and dolls
Will keep daughter busy until
bedtime calls.
Junior with builders sets and
modeling clay
Can build sturdy bridges the
livelong day.
For this tot, 4 to 6, safety rules
are a must
Because he is active, you
cannot trust
This child with a toy which
could injure an eye
Should he let a swift arrow from
the bow fly.

The child 6 to 8, is most quick
and active,
So roller skates, kite, and sleds
are attractive.
They teach him to play out of doors
in the air,
In summer, in winter, on days
bright and fair.
A carpenter bench for a dull,
rainy day,
Will teach him to build, although
at play.
Approved 'lectrical toys are under
the tree.
A train is the very first toy
he will see;

For this age child, avoid sharp-edged tools
Which may make him break all the safety rules.

For sister and brother, 8 years or older,
Santa has gifts that make them bolder;
A jungle gym real exercise provides,
And a bicycle brings many happy, long rides.
Stamps for the collector are the gift for Bobby,
Because he has made this his very own hobby.
A puppet show and materials for crafts
Will occupy hours and provide many laughs.
No dart games or chemistry sets are around,
And no air rifles 'neath the tree are found.
For these things are dangerous as dangerous can be
'Cause children will shoot whatever they see.
A mixture of chemicals could ruin the score,
For a loud explosion through the house might roar.

Santa understands his girls and boys,
So he and the parents are cautious with toys.
They must be safe, so all will have fun,
Whether playing indoors or out in the sun.
On Christmas morn, along with the dawn,
The children wake up without even a yawn.
Down the stairs they come laughing with glee
To see what dear Santa left under the tree.
Mother and Dad watch fondly and smile
As the youngsters stand transfixed for awhile
At the many gifts left while they slept
When old Kris Kringle down the chimney had crept.
May their lives be always safe, happy, and gay
As they are on this joyous Christmas day.

FILM NEWS

TELEVISION PICTURE *Tube Implosions* is a new motion picture produced by the Engineering Extension and Engineering Experiment Station of Iowa State College. Using slow motion photography, the opening sequences show just exactly what happens when one of these tubes implode—the flying, sharp particles cross over one another from front to back and scatter with terrific force. The implications of these actions in terms of possible physical injury to anyone in the vicinity are clearly indicated.

From there, the film shows how to protect oneself against such hazards. First the handling of tubes in the factory, wholesale house, and retail store are covered. Then the repairman and housewife are instructed in removing tubes and spotting danger in sets. Attention is also given to making discarded tubes safe from the possibility of being imploded by curious children who might be playing nearby. Prints of this film can be purchased from Engineering Extension, Iowa State College, Ames, Iowa.

Important Announcement

On January 1, 1958, the National Safety Council turns over its film rental libraries to Association Films, Inc., who will handle bookings, shipments, and billings direct with the customers. From that date, please address and send orders for rental or loan prints to Association Films, Inc., *not to the National Safety Council.*

Association Films, Inc., have four distribution offices: in Ridgefield, N. J. (Broad at Elm); in La Grange, Ill. (561 Hillgrove Avenue); in San Francisco, Calif. (799 Stevenson); in Dallas, Texas (108 Jackson). To speed bookings send requests to the office nearest your locality.

The council is accepting rental and loan bookings for dates up to and including December 1, 1957. Orders for preview and purchase prints should always be addressed and sent directly to the National Safety Council.

ABOUT PEOPLE

Cutter Directs Safety Education Center

WALTER A. CUTTER, PH.D., is the new director of the Center for Safety Education, Division of General Education, New York University, New York, N. Y. He succeeds Herbert J. Stack, director since 1938 who retired from that position to become program associate August 31, 1957. Dr. Stack will continue as chairman of the department of safety education in New York University's School of Education.

Steed on Educational Leave

H. C. Steed, Jr., director, Accident Prevention Unit, Environmental Health Service, Georgia Department of Public Health, Atlanta, Ga., left on educational leave September 1, 1957. He will be attending the University of Michigan's School of Public Health, Ann Arbor, Mich. He plans to return to the Accident Prevention Unit next June, following completion of his work at Michigan.

Roy J. Boston, director of Environmental Health Service, will serve as acting director of the accident prevention unit; however, routine correspondence, inquiries, etc., should be directed to Robert M. Alden, health education consultant of the Environmental Health Service of the department.

Miss Helen Ronayne, nurse consultant, will remain on the unit's staff.

Delaware Assigns Full-Time Staff

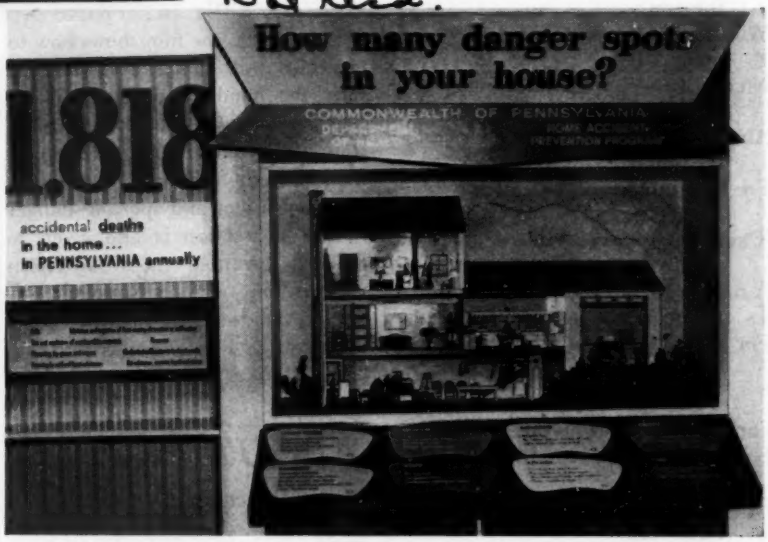
Mark Kenyon, M.D., director, Preventive Crippling Program, Delaware State Board of Health, Dover, Del., is devoting full-time to home safety.

A WORKSHOP IS BORN

Virginia Barckley, R.N.

Consultant in Mental Health
Bureau of Public Health Nursing
Pennsylvania Department of Health
Harrisburg, Pa.

Above: A group of nurses learned the location of local poison control centers at a workshop at Boiling Springs, Pa., last June.



A safety house where many hazards are shown was used as a group work project by nurses of the Penn. Dept. of Public Health at the workshop.

THAT ACCIDENTS are high on the list of the principal causes of death compiled each year is well known to public health nurses. That the injuries received create suffering, financial hardship, mental anguish, and sometimes permanent handicaps we know, too. We easily surmise the enormity of the lost or curtailed years of productivity and potential leadership when we consider the life expectancy of many accident victims.

To discover what more we might do to help reduce this bleak portrait to a miniature, the Bureau of Public Health Nursing in the Pennsylvania Department of Health decided to have a workshop for the supervisory and consultant staffs at Allenberry Inn, Boiling Springs, Pa., on June 5, 6, and 7, 1957.

Many accident prevention workshops are planned, but few in an official agency are especially designed by nurses for nurses, according to Miss Jean Williams, nursing consultant in accident prevention, Public Health Service, Washington, D. C. Usually such projects have considered farm and highway accidents, as well as drownings, and have included specialists on wiring, lighting, and building design as resource people. When we contemplated our foray into the accident prevention field, our committee discarded these ideas in favor of a deeper concentration on the prevention of injury from home accidents. We decided our constant point of reference should be the nurse's role, which falls logically in the home.

From the beginning, we felt that accident prevention was not new, but a permanent component of all the programs we carry. We are confident that our public health nurses are alert to a long list of dangers such as suffocation of infants and falls among the aged. We know that some safety instructions have always been included in the home visit. Indeed, it is so much a routine matter while talking to mothers in their kitchens to caution them about the protruding pot handles so intriguing to the toddler, that we often fail to record it.

What was our goal then? We hoped to reenforce some of the previous safety concepts held by our nurses to expand their awareness of opportunities for teaching and to delimit their role.

Rather than present a straight version of home accident prevention, we concluded that relating it to the growth and development of human beings from birth to senescence would be effective. Throughout the conference, the age, the physical status, mental attainments, and emotional climate of the child, the parent, and the grandparent were closely correlated to the kind of accident to which they are sus-

ceptible. This knowledge is of value to public health nurses. When we acquire the habit of thinking that toddler plus natural curiosity about an expanding world plus ability to walk and climb equals a new proximity to such lethal household agents as lye, kerosene, and aspirin, we can give more pertinent guidance to parents whose children are approaching this shoal after the comparatively safe period of infancy.

The problem of selectivity is no trifle in the growth and development of the embryo workshop. This relates to both content and presentation. How to anticipate the response of our working members concerned us. Would they learn from role playing, or would they prefer problem solving groups? Would a panel discussion leave them unsatisfied? Ultimately we decided on multiple methods to stimulate interest and vary the pace.

Advancing from the general to the specific, a king size view of the whole accident picture was given at the very beginning of the workshop. This was followed by a review of pertinent statistics and definitions. Subsequently only concepts relating to the nursing role were introduced.

A novel note was introduced by Mrs. Anna dePlanter Bowes, director of the Division of Nutrition. She demonstrated simple safety devices used in her own kitchen. These could be duplicated by anyone in her audience, most of whom double in brass as career women and homemakers.

All of us know that an adequate diet will reduce fatigue, and most of us realize that fatigue is a frequent precursor of an accident. A fresh look was given to our theme when Mrs. Bowes developed these ideas. Although this concept is not complex, one seldom observes nutritionists on panels in the accident prevention area. Perhaps this omission illustrates the truism that we seldom notice the obvious.

Professional publications emphasize the high incidence of accidents at each end of the age scale. In between these extremes is there a forgotten person? We think so. She is a member of the unsung supportive group. She is the mother on whom the burden of worry, extra work and unexpected bills falls when either her child or her parent is injured. She may expend so much time and energy as a homemaker that her exhaustion leads to the impulsive action or lack of judgment which provokes accidental injuries. If she is employed she must plan for the safety of her youngsters and oldsters while she is absent. Small wonder that our theme for this problem was "The Mothers Are in the Middle"!

The returns from the preconference questionnaire sent out to the nurses indicated interest in methods of arousing community participation in home accident prevention programs and requested help in organizing them. Partially to answer this need liberal amounts of source material were included; our large colored pegboards contained samples of available literature, movie lists, and posters. As an added fillip, our director of health education, Robert Milligan, spoke on this subject from his own experience.

Because of their importance, the emotional aspects of home accidents were a prominent feature of our workshop. This was not through a naive assumption that merely pointing out constructive or deleterious attitudes would reduce the occurrence of accidents, but rather from a conviction that the more precisely emotional influences can be identified, the more realistic will our methods for dealing with them become.

Our committee has held in reserve an idea for some future project on the relation of work simplification to the prevention of injuries from home accidents. Could some of the ingenuity displayed in the arrangement of the kitchens for cardiac patients be borrowed for use in workshops in accident prevention? Women whose sinks and tables are the proper height for them, who plan to sit while ironing, whose reach does not exceed the special physical grasp which is theirs, who have all of their coffee-making paraphernalia in one spot and their baking utensils in another must save countless steps and tremendous energy each day. By avoiding fatigue and hurry they must also save themselves many cuts and burns. An imaginative presentation of the numerous methods to simplify homemaking would be closely allied to accident prevention. Such "wife savers" might really be life savers.

Pennsylvania's famous "safety house," a replica of a three-room home with bathroom, yard, basement, and garage where many hazards are shown in the doll sized furniture arrangements was used as a group work project by our nurses. The creation of our accident prevention director, Hugh Sarraf, the house with its identifying data is 10 feet high and 8 feet long, with one side exposed to demonstrate common dangers. The nurses vied with each other to discover these points, and curiously their lists of hazards far exceeded those purposely planted by the designers.

A skit called *Mrs. Dalton's Day* summarized dramatically many of the themes of the conference. That accidents do not exist in a vacuum but are largely predictable events which are part of a chain was illustrated when the mother of four, already tired by constant interruptions, an ailing parent, impatient children, and fretful baby, burned herself and then propped the child's bottle so that he nearly strangled. Constructive thought was depicted too. The public health nurse who is sensitive and accepting, the rewards of sharing, the value of investing older people with dignity, and understanding adolescent needs were all interwoven in the action.

Now that the workshop is over, how do we feel? Our nurses have not only increased the funds in their mental banks, but they have greater knowledge of how to invest these sums, too. We think that nurses can best determine what nursing functions are in any area and that by identifying our particular role and striving to do it well we shall make our maximum contribution to the prevention of injuries from home accidents.

From consulting the postconference evaluations, we know the participants concur.

THIS IS A reprint, with revisions, of a skit as it was presented by members of the Women's Committees at the Eleventh Annual Home Safety Forum of the Women's Division, New Jersey State Safety Council, in Newark, N. J., April 30, 1957, which skit was published by the council.

It was developed by Miss Edith R. Doane, director, Women's Division, New Jersey State Safety Council, with the assistance of several friends and the Educational Service Department, Products Division, Bristol-Myers Co., New York, N. Y.

Safe Hands All Round

A Short Skit to Emphasize One Phase of Home Safety

THIS SKIT IS an entertaining way of showing some of the ways in which the homemaker's hands can be kept safe from careless and painful accidents. It should be presented in a dignified manner, although the tone may be light and amusing throughout.

Its performance, with models wearing the articles described and perhaps pantomiming the commentary of the narrator, will dramatize some of the best ways to prevent the commonest types of hand accidents due to burns from fires, steam, and hot liquids, to cuts and bruises, and to strains and sprains. If desired, it may be altered to highlight or expanded to include some additional types of protective devices.

This fashion-show type of skit uses a narrator who reads the entire commentary and several ladies who model the equipment described. They should wear appropriate housedresses and shoes and be rehearsed in pantomiming the script at the proper time and in handling the simple properties. As the narrator finishes commenting on each group of items, the model wearing them removes and hangs them on a central model who remains standing on the platform from start to finish so that at the end she is wearing all the items mentioned.

WE HAVE OFTEN heard the expression that the hand that rocks the cradle rules the world. That may have been true 350 years ago in Jamestown, Va., when the Pilgrim mothers watched over their children in that new American settlement. But since then the cradle has been replaced by the crib which cannot be rocked, and mothers have learned other methods of getting their children to sleep — methods which have freed the hand for other important work.

The hand is one of the most perfect mechanisms ever contrived, and certainly it is one of the most useful —perhaps second only to the wheel. Like a faithful servant, it does what it is told to do.

It turns off the alarm clock and turns on the coffee water. It helps toddlers to dress and guides grandmother's faltering steps. It bandages scraped knees and wipes away tears. It guides the vacuum cleaner and polishes the floor. It prepares food and launders clothing. It writes a cheerful message to the ill and signs a check to pay a bill. It plays games and turns a key in the ignition of the family car.

The hand lifts, grabs, pushes, pulls, picks up, opens, closes, folds, scrapes, wraps, writes, sews, dials, washes, ties, and "does-it-yourself" and does a host of other chores. When one of the parts of the hand is injured, the others suffer too because they are called upon to do extra duty, sometimes in ways in which they are not skilled. And when one hand is out of circulation, immobilized in a cast or swathed in bandages, the other hand is doubly valuable. How many of you have ever tried to hook up a bra or tie a shoelace or wind a curler or cut meat or wipe dishes with just one hand?

A wonderful thing is the hand. Some say the lines of our past, our present, and our future are etched upon it, and I do not mean last night's scratch from a dull knife or this morning's burn from the hot oven. Anything so important deserves the best of care, better than that we usually give it.

The hand can be injured in three principal ways—by burns from fire, steam, and hot liquids, by cuts and bruises, and by sprains and strains.

Our **first model** _____ is wearing mismated mits as you can see. She may be setting a new style in gloves for the housewife to prevent painful burns while working around the hot stove. Each is of thick, padded material which will not ignite if exposed to a flame or a hot coil and cause burns to the wearer's hands. On her right hand is a shortie style so favored right now, useful for short reaches and light dishes. On her left hand is a longer style, so fashion correct with pushup sleeves this season. Both are suitable for taking the pans from the oven with care, so the roast, not the skin on your arm, will be rare!

Without these protective coverings she might become a victim of countless burns, little red stripes that disfigure and sometimes cause much needless suffering. Such telltale tattoos, no matter how ornate or colorful, might be high style on another continent but not on this one. Both

long and short styles come in a variety of plain and flowered coverings to match or contrast with any kitchen color scheme or gown. These gloves are fashionable too for handling hot dishes at outdoor grills, although a chef may prefer a less colorful item.

Another, smaller style is worn inside the palm of the hand and is not actually a glove at all because it leaves the wrist and fingers exposed to danger. It is called a pot holder. This comes in square styles but the preferred design is round, with no corners to droop over the heat and catch fire with possible burns to the hand and wrist. Both now come equipped with a built-in safety feature—a little piece of magnetized steel which makes the holder cling to any metal nearby, ready for instant use. Some handles get hot while others stay cool. Use a holder at all times; 'tis a good safety rule.

Other gloves, with medium length gauntlets, also come in durable white canvas materials for preventing burns from cold items such as dry ice and the freezer's contents when they are being repacked.

Our **next model** _____ features some fetching millinery and accessories. How dear to any woman's heart is a hat that other women talk about—but preferably not behind her back! She is wearing a neat little cloche number, important for its coolness and durability. The hour pointers are at two o'clock. One is a heat-resistant handle, which eliminates the possibility of a heat-burn from the contents should it be carelessly grabbed without benefit of glove, mit, or holder. The second pointer is a pair of tongs, excellent for removing vegetables from hot water, bacon from hot grease, baked potatoes from the oven, and preventing steam, heat, and grease burns to the hands. The tongs come in both short and long lengths, and it is quite unnecessary to ask for right- or left-handed styles.

On her arm she carries a bright, little handbag of lightweight metal. The handbag is a special type of cover, to keep hot grease from spattering out on the hands. In the handbag she has a spoon with a bent

—Newark News Photo.

In a humorous skit, *Safe Hands All Round*, Mrs. Aubrey S. Walton, Jr., chairman, Women's Committee, Burlington County (N. J.) Safety Council, Moorestown, N. J., demonstrates a variety of household appliances. The skit was presented at the Eleventh Annual Home Safety Forum of the Women's Division, New Jersey State Safety Council, in Newark, N. J., April 30, 1957.

hook in the handle to hang the spoon on the edge of the pan so the handle will not overheat. For those who prefer to remove the spoon entirely from the steaming kettle, or when a cover must be used on it, she has a small dish in which the spoon may be laid on the stove, and in this way she can avoid the possibility of heat and steam burns to the hands.

Boiling, steaming kettle, sputtering grease in the pan,
Be careful how you lift the lid to prevent burns on the hand.
Raise the far side of the lid to shield the hand from heat,
And use dry cloths or holders so steam won't add to steam.

And here we have our **third model** _____ wearing a versatile little something for the shoulders and neck. Spread over the shouders it becomes an abbreviated stole—currently a very high style fashion. Or it may be draped around the neck loosely as a scarf—or more tightly still like an ascot. This scarf, which you recognize as a towel, of cloth or paper, should be kept handy and used to dry the hands on before connecting or disconnecting any kind of electric gadget or equipment. In addition to having the

hands dry, our model will make sure that her fingers grasp firmly the rubber end of the plug to insert or remove it from the outlet, lest wires be pulled out of the plug and the fingers receive a painful burn.

Dry hands and cords correctly used
Save burns and put all the juice to use!

And notice please the attractive bracelet she is wearing—an original design from different kinds of matches. The long grocer's matches alternated with the shorter book-matches in different colors make an effective piece of novelty jewelry. Although differing in size, these matches have one common characteristic: they may severly burn the user's hands or fingers unless they are struck away from her. Since we cannot show our model's correct attitude, we will assume that she will also close the cover of the book-matches before striking one, that she will store all matches in a safe place, and make sure there is no lingering spark in a used match before throwing it away.

From what our **fourth model** _____ is wearing, we can see that she is determined to protect herself from cuts and bruises. She has created an interesting new accessory—a novel belt hung with several safe-hand charms.

The first is a little knife, and because it is sharp, it is encased in a sheath. Sharp blades cut more easily and require less pressure than dull ones do, so the danger of slipping is less. If washed separately, they will cause fewer scratches and big cuts to fingers. Knives are useful servants for many kitchen chores. They should be racked for safety, not just laid out in drawers. Also for fewer finger knicks, pare vegetables away from the body.

Next we have a carving fork with the shield raised to prevent a slipping knife from cutting a rare slice from the hand instead of the bird.

Here we have a rubber paddle. While fingers may have been used to scrape the last drops of cake batter from the mixing bowl, they have been replaced by the rubber paddle in the electric mixer today. This is safer and has less resistance to the whirring beater flange should the current be accidentally snapped on. It also will save gashes to fingers if used to push meat and vegetables down into a food-chopper.

And still another charm is a simple, modern type of can opener, one that cuts cleanly, leaves no jagged edges around the top or metal splinters in the food. The old-fashioned can openers you sawed up and down with left sharp, jagged edges all over the town. Cuts were frequent and painful. We have better ones now. We just turn the handle— a smooth edge all 'round. With so many types of good mechanical, magnetized, and hand-operated openers on the market today, we could have a different one for variety each month in the year.

The last is a cute item—a small bank for used razor blades. Ruby-colored gashes on fingers may not harmonize with a pink frock.

Our **next model** _____ seems also to be concerned with preventing cuts and bruises to her hands. Notice her original earring creation. She favors the large, simulated pearl style with long pendants for impressive effect. The ball of cotton, when moistened, can be used for picking up wisps of broken glass, thus you can avoid sharp cuts and gashes to the fingers. The pendant is a small plastic clothespin which is very good for holding steel wool so the sharp little metal threads will not penetrate the skin on the fingertips.

She also models a new, disposable type of handbag, made of paper. Its lines are tailored and its color subdued. It is very inexpensive and is available in many different sizes in every home. With this she wears a special style of gauntleted glove. This one is pliable plastic which comes in several colors and in small, medium, and large sizes. She wears these largely to protect her hands from scratches and harsh chemicals. With her hand in the glove, she can pick up pieces of broken china, glass, and other sharp objects, place them in her handbag, and dispose of them in the trash can. In this way, no one's hands will be cut from any of the sharp edges.

Now I must confess that we have had a little trouble with our **last model** _____ because she said that her part wasn't very dramatic and she couldn't find many tangible things to help prevent strains and sprains to the hands. One gadget she does want to show you is a circular jar-opener with handles—made to open out and fit different sizes of screw-type jars which will then open easily with just a twist of the wrist. Another gadget is a lid-flipper. She says this does away with the old method of warping the cover with a pry or splintering the glass with the point of a knife.

She said she just couldn't show you how to push and pull and lift furniture and heavy things correctly so you wouldn't sprain your hand or wrist or fingers. She couldn't show you how to aim the hammer accurately when driving nails, but she recommends that you do not use it for a nutcracker. She is careful not to get wood splinters under the skin, not to get her fingers mixed up with moving machinery, not to catch her fingers in drawers and doors, particularly not to fall so she might have to use her hand to catch or protect herself. She asked me to remind you to take good care of any flesh wounds by applying first aid or getting professional help, to keep first aid supplies complete and ready for emergency in order to help minimize injuries and hasten healing. As extra compensation I told Mrs. _____ that she could have the last message for you—so here she is:

I am holding something which every woman, and most men, will recognize as a pattern, a guide used for cutting something to size and design. In practicing safety, each person must design her own behavior pattern to include awareness of hazards and knowledge of their safeguards so that the stress and strain—the warp and woof—of her daily living will be free from mishaps and injuries. (Place the paper pattern in the central model's hand.)

Now that we have all helped to provide Mrs. Housewife with this becoming and useful safety outfit, she is ready to boil water for dinner coffee.

This article (some text and tables omitted) has been reprinted with some revisions from the *Canadian Journal of Public Health*, vol. 48, pp. 131-140, April 1957, published by the Canadian Public Health Association, Toronto, Ontario, Canada.

Review of 1,000 Home Accidents

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THERE IS LITTLE need to stress the importance of accidents as a cause of death in Canada. Accidents are now the fourth leading cause of death when all ages are considered and are the leading cause of death in all ages between 2 and 39 years. While more attention has recently been focused on motor vehicle accidents, accidents occurring in the home contribute a substantial share of this wastage. In 1954, 8,372 Canadians of all ages died from accidental causes. Of this total, 2,128 or 25% died as a result of accidents in the home. This proportion is considerably higher in certain age-groups. In children under 5 years of age and in elderly people of 70 years and over, 58% and 48%, respectively, of all accidental deaths at these ages occurred as a result of accidents in the home. An analysis of home accident deaths by age also indicates the extent of the problem in the very young and the very old. Thirty-two per cent of all home accidental deaths occurred in children under 5 years of age, while 36% were in persons 70 years of age and over.

* * * *

. . . With the active cooperation of four hospitals[1] in the Ottawa-Hull area, an arrangement was made whereby notification was given by means of a simple postcard whenever a patient sought treatment at the out-patient department of these hospitals, for injuries resulting from an accident in the home. (A "home" for the purpose of this study was defined as a single or multiple dwelling and its premises.) On receipt of this notification a visit was made to the home where the accident occurred and the injured person interviewed, or in circumstances where this was not possible, as, for example, when a child was injured, enquiries were made from the mother or other suitable member of the family. During the period July 4 to December 19, 1955, 1,868 such notifications were received from these hospitals and were investigated consecutively as soon as possible after receipt. Substitutions were made in rotation for persons untraceable, unco-operative or living outside the area, until the objective of 1,000 home accident investigations had been completed.

The type of accident, for example, falls, burns, cutting and piercing accidents was determined, and the nature of the injury resulting from the accident was ascertained. The time of occurrence of the accident was determined in relation to the hour, and day of week. An investigation was made of environmental factors, the location within the home where the accident occurred, the activity of the person at the time of accident, and the part that the acts or omissions of other persons contributed to the causation of the accident. Other environmental factors such as income, type of housing and family history were noted. The characteristics of the persons suffering the accidents, such as age, sex, marital status, and occupation were investigated. A history of previous accidents was obtained and the presence of certain physical defects, associated with the causation of the accident, as paralysis and defective eyesight and hearing were noted. An attempt was made to assess the personal attributes of the injured persons, as impulsiveness, carelessness, and the lack of concentration and responsibility in adults when these appeared to have contributed to causing the accident. Similarly in children, disrespect of authority and the effects of lax supervision were noted. An investigation was also made of the agent concerned in accidents of various types.

It should be borne in mind that since the only accidents included in this series were those for which the injured person sought medical aid at one of the four Ottawa and Hull hospitals, this series may not be representative of all home accidents. The conclusions drawn in this study are, therefore, only in relation to the 1,000 accidents investigated. Many of these conclusions are matters of interpretation and opinion, but an

[1]The assistance of the superintendents and staff of the Sacred Heart Hospital, Hull, Quebec, and the Civic, General, and St. Louis Marie de Montfort Hospitals in Ottawa, Ontario, whose co-operation made this study possible, is gratefully acknowledged.

TABLE V
1,000 Accidents by Type, Age and Sex

Type of Accident	Under 1 Year	1-5 Years			6-16 Years			17-59 Years			60 years and over			All Ages		Total
		M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	
Cutting and Piercing	1	28	11	39	39	18	57	64	71	135	10	4	14	142	104	246
Fall from one level to another	4	74	53	127	29	23	52	17	35	52	7	16	23	129	129	258
Fall on same level	1	37	23	60	16	22	38	18	20	38	6	8	14	78	73	151
Burns	3	12	6	18	2	2	4	10	16	26		1	1	25	27	52
Poisoning	1	14	8	22				1	1	2				15	10	25
Blow	4	31	13	44	17	12	29	10	12	22	2	4	6	62	43	105
Foreign body entering body orifice	1	9	10	19	2	5	7	5	4	9				16	20	36
Accidents caused by animals and insects		4	1	5	4	3	7	3	3	6				11	7	18
Other	1	28	14	42	9	11	20	18	24	42	2	2	4	58	51	109
Total	16	237	139	376	118	96	214	146	186	332	27	35	62	536	464	1,000

attempt has been made to ensure as far as possible that interpretations were consistent throughout.

The Accident

By Type:

. . . from the distribution of the 1,000 accidents investigated . . . cutting and piercing accidents and falls from one level to another each contributed about one-quarter of the total. . . . All falls made up some 40% of the accidents investigated. Burns contributed a little over 5% and poisonings 2.5% of all accidents. The other sizable group, blows, represents accidents which were caused by moving objects striking the body of the injured person. The group, foreign body entering body orifice, includes the accidents caused by many varieties of substances entering the eye, nose, ears, etc. Accidents caused by animals or insects usually resulted in bites and scratches.

By Day of Week:

When the day of the week on which the accident occurred is noted . . . as might be expected, more accidents occurred on Sundays and Saturdays than on any week-day. The same observation holds for each type of accident except . . . that Saturday's incidence of cutting and piercing injuries is relatively low. The miscellaneous group "other accidents" was most frequent on Monday and on the week-end. This clustering of accidents on the week-ends can probably be explained by exposure, more members of the family then being present in the home for longer periods than on other days of the week.

By Time of Day:

. . . all accidents and each type of accident were most frequent during the period 4:00-7:00 p.m. and consistently next in frequency during the period 10:00 a.m.—1:00 p.m. Almost half of all accidents investigated occurred during these two three-hour periods of greatest household activity. The association of cutting and piercing accidents (54%) and burns (52%) which coincides with the preparation and cooking of food at these times is particularly evident. The comparatively small number of cutting and piercing accidents and burns which occurred during the period when breakfasts are being prepared is striking.

Accidents in Relation to People

All Accidents by Age and Sex:

. . . approximately 40% of all persons suffering accidents in this series were aged 5 years or younger, while 60% were under 17 years of age. Accidents were distributed evenly between the sexes under 1 year of age, a heavy predominance of boys is evident between the ages of 1-16 years, while accidents in adults were more frequent in women. Of the males who suffered accidents, 68% were 16 years or younger, while only 52% of the females were in these ages. Only 2% of the males and 4% of the females were 70 years and over.

Marital Status and Occupation:

Of all persons 16 years and over who suffered accidents, 280 out of 399 were married.

The occupations of persons suffering accidents, by main occupational groups, were recorded. The largest single group was pre-school children (38%) followed by students (21%). Of the adults, housewives comprised the largest single group (14% of all accidents and 35% of all adults). Other groups of substantial size were typists and clerks, craftsmen, labourers and retired people.

All Accidents by Type, Age and Sex:

Contrary to what might have been expected, more males than females suffered cutting and piercing injuries (Table V). In only one age-group (17-59 years), which would include the majority of housewives, was the proportion of females higher than males (52%). In age-groups 1-5 and 6-16 years, over twice as many boys suffered cutting and piercing accidents. Falls (all ages) from one level to another were distributed equally between the two sexes. In age-groups 17-59 and 60 years and over, twice as many women suffered this type of accident, although in the younger ages the boys predominated. A similar picture is seen in falls on the same level, although the distribution between the two sexes at various ages is more even. More women suffered burns in ages 17-59, but the situation was reversed in ages 1-5 years. The association of poisoning with pre-school children was striking, 23 out of the total of 25 poisoning accidents occurring in children 5 years of age or younger.

History of Previous Accidents and Association of Certain Physical Defects with the Accident:

An enquiry was made concerning the history of previous accidents and the presence of certain physical defects which appeared to be associated with the accident under investigation. It was seen that 20% of persons in this series had suffered one previous accident, and an additional 6% had suffered more than one previous accident. Physical defects appear to play a relatively small

part in accident causation since in only 2.5% of all accidents did a physical disability appear to be significant. Defective eyesight was associated with 7 accidents, defective hearing with 1, paralysis or other disability with 3 and bad general health with 14 accidents.

Association of Certain Characteristics with Causation:

A preliminary analysis has been made to assess the part that certain personal characteristics played in the occurrence of the accidents. In the pre-school group it appears that the most dominant factor was lack of supervision and carelessness on the part of responsible persons. In over three-quarters of all accidents in pre-school ages, these characteristics on the part of some person played a part in causation. In the school age-group lack of a sense of responsibility and carelessness entered into the causation of more than half the accidents, and carelessness contributed to more than half of all adult accidents. Lack of concentration and impulsiveness appeared to play a more minor part in all ages as did bad upbringing and a disrespect for authority in the pre-school and school age groups. In a separate analysis of the 137 accidents where lack of concentration was a factor, it was found that haste "to get the job done" was responsible in half these accidents, or in some 7% of all accidents.

The Accident in Relation to the Agent

Cutting and Piercing Accidents:

It will be noted that the largest number of cutting and piercing accidents (Table VI) was caused by broken glass (25%). Knives and nails each contributed about 15% of this type of accident and tools and power tools, sharp edges of cans and other metal were responsible for substantial numbers. As previously noted, more males than females suffered this type of accident. Knives, cans and glass injured more females than males while nails, slivers and splinters, sharp metal, tools and power tools caused more male accidents. Only one out of a total of 35 persons injured by tools and power tools was a female, which would seem to indicate that the trend "do it yourself" has not yet affected the ladies. The one woman injured by a power tool was a lady trying out the new power mower. Conversely, all those injured by needles and pins were women. In relation to age it will be noted that in general this type of accident affected adults, as only 16% of these accidents occurred in children 5 years or younger. Nails caused one-third of all cutting and piercing accidents in this age-group, and were the single agent responsible for the highest proportion of cutting and piercing accidents in this age-group.

Falls from One Level to Another:

. . . stairs were the single agent responsible for more falls from one level to another than any other. Falls from chairs, verandahs, balconies, beds and carriages were next in frequency. Stairs were the only important agent responsible for more female falls. Only males fell from windows and trees but more girls fell from swings and trapezes. Of the agents affecting all ages, falls from stairs, chairs, verandahs and balconies, beds and carriages were of particular importance in the pre-school ages.

Falls on the Same Level:

Of the 151 falls on the same level, more than one-half resulted from "trips," and of the persons who fell as the result of a trip, half were in the 1-5 years age-group. Various objects could be identified as immediately causing the trip, such as rugs, cracks, uneven sidewalks, and stones, but a considerable number occurred while walking or running where no specific agent could be incriminated.

One-fifth of all falls on the same level resulted from "slips," and in contrast to trips, three-quarters of persons who fell as a result of slipping were adults. Waxed floors were the most frequent agent, followed by slips in the bathtub, on ice, wet tiles and linoleum, and slips caused by loose rugs on waxed floors.

Burns:

Forty per cent of the 52 persons burned were 5 years or younger. Over half of these burns were caused by scalding liquids and grease, and one in four was caused by electrical appliances. Half of the scalding accidents (excluding scalds from grease) and one-third of burns from electrical appliances occurred in the pre-school ages. All of the 4 scalds from grease were suffered by adults.

Poisoning:

Aspirin, the most common household remedy, was responsible for 28% of all poisoning accidents, and for one-half where the substance swallowed was in pill form. . . . The poisonous substance most frequently taken in liquid form was paint thinner or turpentine. An interesting observation is that in 4 out of the 7 poisonings from aspirin and 7 out of the total of 14 poisonings from

TABLE VI
Cutting and Piercing Accidents by Age, Sex and Agent

Agent	Under 1 Year	1 — 5 Yrs.			6 — 16 Yrs.			17 +			All Ages		Total
		M	F	Total	M	F	Total	M	F	Total	M	F	
Glass		3	1	4	9	7	16	14	27	41	26	35	61
Knife		2	5	7	7	5	12	6	13	19	15	23	38
Nail		10	2	12	9	1	10	6	4	10	25	7	32
Tools		3		3	2		2	17		17	22		22
Power tools		1		1	2		2	9	1	10	12	1	13
Can		2	1	3	1		1	2	8	10	5	9	14
Sharp metal		1		1	3		3	6	2	8	10	2	12
Needle and pins									9	9		9	9
Sliver and splinter								6	2	8	6	2	8
Other	1	6	2	8	6	5	11	8	9	17	21	16	37
Total	1	28	11	39	39	18	57	74	75	149	142	104	246

substances in pill form, the pills responsible were candy-coated or flavoured.

Accidents Caused by Washing Machine Wringers:

In considering the agent, accidents caused by washing machine wringers were sufficiently common to warrant special mention. Thirty-two accidents (3% of all accidents) were caused by wringers. Twenty-five of these accidents occurred in children 16 years of age or younger, and of these, 18 involved children 5 years or younger (13 boys and 5 girls). All of the 7 adults injured in this manner were women over the age of 41. It will be apparent that wringers are a particular hazard to young children as 56% of all wringer accidents occurred in children 5 years or younger and almost 5% of all accidents in this age-group were caused by wringers.

The Accident in Relation to the Environment

Place of Occurrence:

It will be noted that a larger proportion of all accidents occurred in the kitchen (23%) than in any other single location, although the yard followed closely with 22% of all accidents (Table IX). Some 11% of all accidents occurred in the bedroom. Of the main types of accidents, more cutting and piercing accidents (37%) and more burns (75%) occurred in the kitchen than in any other single part of the home. Falls from one level to another were most frequent in the yard, on inside and outside stairs, and on verandahs. Falls on the same level were most common in the yard and in the bedroom. Poisonings were most common in the kitchen and bedroom, these two locations together accounting for 56% of all poisoning accidents. The frequency of the miscellaneous group, all other accidents, was greater in the yard and in the kitchen than any other single location.

Activity at the Time of Accident:

The largest single group of all accidents occurred when children were playing alone (24%). Twenty per cent occurred when children were playing with other children. A substantial proportion of all accidents (10%) occurred while the person was in the act of walking, 10% of all accidents occurred while working or playing with tools or appliances and 4% during the preparation or cooking of food. Falls were the most frequent type of accident when children were playing alone or with other children. The largest number of cutting and piercing accidents occurred when working or playing with tools or appliances. Burns were most common (35%) while preparing or cooking food.

The Nature of the Injury

The injuries resulting from the 1,000 accidents investigated were recorded by the most serious type of injury received . . . the most frequent injuries in this series were lacerations and open wounds (47%), followed by superficial injuries, contusions and crushings (19%), fractures (11%), dislocations (0.6%), sprains and strains (6%) and burns (5%). . . . in 10 of the injuries the disability resulting was considered to be "permanent" owing to loss of tissue or interference with function. This assessment of "permanent" disability was made at the time of investigation of the accident. A follow-up of injured persons to assess the long-term degree or period of their disability has not been made.

As far as is known, only one death occurred in the series of accidents investigated. This was a case where an eleven-month-old child was scalded by pulling a container of hot water from a stove. It is thought probable that the low death-rate in this series of accidents is due to the selection of cases inherent in this study.

Are Accidents Preventable?

The circumstances surrounding each accident were examined carefully in an attempt to determine whether the accident could have been prevented by reasonable care and forethought. It was concluded that three-quarters of all the accidents studied could have been prevented if care and forethought to a degree which might reasonably be expected had been applied. Five per cent of the accidents did not appear preventable in these terms and in 19% it was not possible to make a decision.

Summary and Conclusions

A review of 1,000 accidents occurring in the home causing injuries for which medical attention in a hospital outpatient department was sought, is reported. A study has been made of the characteristics of the host, the environment and the agent which together contributed to the causation of the accident. Falls were the most common type of accident encountered in the series, followed by cutting and piercing accidents. The extent of the problem of home accidents in young people is made evident, 40% of all accidents studied, 92% of accidental poisonings, and 47% of all falls having occurred in children 5 years of age or younger. It is indicated that in 3 out of 4 accidents involving these young children, lack of supervision and carelessness on the part of some person contributed to the causation of the accident. Carelessness appeared to be a significant factor in half of the adult accidents. There are indications that three-quarters of the accidents observed were preventable had a reasonable degree of care and forethought been applied.

TABLE IX

1,000 Accidents by Type and Place of Occurrence

Type of Accident	Kitchen	Bedroom	Living Room	Inside Stair	Basement	Hallway	Bathroom	Yard	Verandah	Outside Stair	Laneway	Sidewalk	Porch	Shed	Garage	Balcony	Others	Total
Cutting and piercing	91	16	8	2	16	8	2	66	3	1	5	•	1	9	2	1	14	246
Fall from one level to another	19	22	12	43	7	4	5	48	30	37	4	2	10	5	1	1	8	258
Fall on same level	13	22	16	1	2	10	9	41	4	2	5	11	3	1			11	151
Burns	39	4		1			1	2	1						1		3	52
Poisoning	7	7	2		3		3				1		1				1	25
All others	59	35	14	4	16	13	14	68	14		8	4	2	1	1		15	268
Totals	228	106	52	51	44	35	34	225	52	40	23	18	17	16	5	2	52	1,000

THE BEDROOM

E. D. Pulliam, *formerly supervisor, Accident Control Section, Kentucky Department of Health, Louisville, Ky., stated that this material is based on the surveys they conducted in Harrison and Marshall Counties. The preventive angles were worked up from many other sources of information. This was produced by the Accident Control Section (now the Division of Accident Prevention of which H. Earle Belue is the director) of the Kentucky Department of Health and can be useful in planning a broadcast, 5-minute talk, a poster, or an exhibit.*

The Bedroom

In the Marshall County, [Ky.,] home accident survey [in February 1955] the bedroom ranked fourth as the place where accidents most frequently occur. In the Harrison County survey [in April 1954] it also ranked fourth.

Persons most prone to be hurt in the Harrison County study were under 6 years of age, but all age groups were about equally affected in Marshall County.

In the bedroom falls were the most common type of accident in both counties; in Harrison County burns ranked second; third in Marshall County (after blows). In the older age groups people fell while they were getting in and out of bed, getting dressed, or making the bed.

Suggestions for Making the Bedroom Safer

1. Arrange furniture so there is a clear path from all doors to the bed.

2. Provide for a light switch at the entrance to every room.

3. Provide a light at the bedside which can be turned on before the person gets out of bed and off after he gets in. If this is not possible, put a flashlight on the bedside table.

4. If small rugs are used in the bedroom, be sure they are made slipproof.

5. Sit down while dressing your feet.

6. Straighten the bedroom before you go to bed. You may get up in the night, stumble, and fall over clothing and other articles left lying around.

7. Many people are seriously injured from falls suffered when they are going to and from the bathroom at night. If you have an aged or infirm person living at your home, provide him with a commode so that he doesn't have to go to the bathroom at night.

8. Never smoke in bed. For all too many people that last cigarette at night has really been the last.

9. Teach all members of the household what to do in case of fire. A plan has saved many a life.

In a home with bedrooms on an upper floor it is important to provide some way of escape without injury in case the stairway is in flame.

Such an escape might be an outside stairway or a one-story garage or porch roof. On a balcony or porch roof a ladder might be kept secured with chains so that it will not slip when thrown over the edge as a means of escape.

When a window must be used, the screen and storm sash should be easily and quickly opened from the inside.

10. If you have a gun, always unload it, and keep it with your ammunition under lock and key [preferably not in the bedroom to prevent when half asleep the possibility of shooting by mistake a member of the family for an intruder]. Keep the key safely beyond the reach of children.

11. Heating devices of all kinds should be used with extreme care in the bedroom and turned off before you go to sleep. Heating pads, heat lamps, gas and kerosene heaters cause many burns and fires.

12. When baby sleeps, he should sleep by himself. It is not always necessary to invest in a crib; a sturdy wooden box may be substituted.

If a crib is in use, its bars should be close enough together so that the baby can't get his head between them. The side rails should latch securely and be up at all times the baby is in his crib.

Keep all pillows out of the bed. Use a firm, hard mattress.

Do not hang anything over the sides of the crib. The baby could pull it down over his face.

See that the room is well ventilated if gas or other fuel burning heater is used.

Check on sleeping child periodically.

This article entitled "Service Statistics for Home Accident Prevention Programs" has been reprinted from Public Health Reports, *vol. 72, No. 6, pp. 494-498, June 1957, published by the Public Health Service, Washington, D. C.*

SERVICE STATISTICS

For Home Accident Prevention Programs

ACCIDENTS IN the home have become increasingly important as a cause of personal injury and loss of life; therefore, State and local health departments are recognizing the need for greater attention to home accident prevention. Since preventive programs are not yet being carried out to any great extent, techniques for evaluation of services are in an early stage of development. Because of the limitations in measuring certain phases of accident prevention, attention is directed here only to those items which are measurable.

While determination of program objectives does not fall within the scope of this guide, it is recognized that a long-range objective of home accident prevention is to lower the occurrence of accidental injuries, thus reducing morbidity and mortality.

It is essential to delineate that portion of the total objectives toward which the program is being directed at any one time. For example, one phase of the program may be directed toward reduction of accidents from certain causes, another toward prevention of accidents among certain population groups such as children or the aged, another toward reduction of accidents of designated severity, and still another toward increasing the awareness of accident-producing situations. Whatever the immediate focus of the program the objective should be clearly stated.

Determination of the steps toward achieving the long-term objective of a home safety program usually leads to the organization of the program under the following general types of activity:

- Orientation and inservice training of the public health staff.
- General education of the public.
- Specific services to individuals and groups.

The job of home accident prevention belongs to all workers in the field of public health. At an early stage, program planners must enlist the help of the health educator, the statistician, and other staff service personnel. The staff should function as a part of the professional team throughout the stages of program planning, operation, and evaluation[1] [see page 26].

In evaluating any public health service it is necessary that there be a clear understanding on the part of all concerned regarding definition of terms used. Lack of such understanding leads to considerable loss of comparability of data and thus minimizes the value of evaluative studies. An effort is being made to standardize definitions and study is continuing through the Conference on Definitions of Accidents.[2-4]

STATISTICAL INFORMATION

Measuring Extent and Nature of Problem

For study and comparison, accident experience is best expressed in terms of both numbers and rates of death and, wherever possible, nonfatal injuries. Detailed facts about home accidents should be compiled and made available to all agencies concerned with public health.

In addition to assessing the extent and severity of the problem, there is need for taking stock of present activities in the field. The Proceedings of the First and Second Michigan Conferences on Home Accident Prevention[2] discuss facts, figures, and findings. The individuals, families, or groups served by public health and allied workers should also be studied. Analysis of the causes of accidental injuries and deaths is a means of identifying and substantiating specific problem areas.[3-6]

The following items are suggested guides to the measurement of the problem for the purposes of emphasizing the areas in which activities might be most effective. Such measurement directs the planning of sound programs, provides the basis for needed legislation, and encourages the development of new standards through voluntary action. To be most meaningful, the suggested facts must be considered not only in themselves but also in relation to each other. These are by no means all of the facts and circumstances which may be classified for study nor does the order of their listing suggest their relative importance.

Data on area

Distribution of population by age, sex, and race.
Other descriptive information.

Data on fatal and nonfatal accidents

A complete description of the accident, the nature of the injury, and the consequences of the accident and injury will serve as a guide to measurement of the problem.

Age, sex, and race of the victim.
Activity at time of accident.
Probable cause of accident (personal or environmental factors).
Location on premises where accident occurred.
Time of day, week, or season.
Physical agent involved in accident.
Physical agent producing injury.
Manner and nature of injury.
Duration of disability.
Medical attention or hospitalization.
Wages lost, property damage, and other costs.
Medical and nursing costs.
Cause of death.
Place of death.

Data on other related factors

Sources of information such as victim, family, or neighbor.
Occupation of victim or head of household.
Physical condition of victim.
Type of home.
Location of home: urban, farm, or nonfarm.
Physical factors of general home environment.
Size of family.
Number of previous accidents.
Economic factors, if possible.
Other persons involved in accident.

Data on community knowledge and attitudes

Attitudes toward home accident prevention.
Knowledge of and attitude toward accident producing situations.
Possible ways of avoiding occurrence of similar accidents.
Suggested ways of avoiding recurrence of the accident.
Sources of health and safety information.

Because of the difficulty of measuring knowledge and attitudes little information is available. However,

the bureau of maternal and child health of the New Jersey Department of Health has conducted a study designed to obtain data relating to these subjects.[7]

Sources of Data

There are many limitations to be considered in determining sources of data for planning and administering a program. Questions which must be answered are:[2] How reliable are the sources? Are they valid? Do they assure completeness of information?

Following are some suggested sources of data on fatal and nonfatal accidents.

Fatal accidents

- Death certificates supplemented by data collected with the National Office of Vital Statistics Home Accident Fatality Report or a similar epidemiological report.
- Hospital or emergency room reports if arrangements are made for the inclusion of detailed information about the accident.
- Reports of the medical examiner following inquiry into the circumstances of the accident.

Nonfatal accidents

- Sample surveys of homes.
- Surveys through schools, industries, service and social organizations.
- Hospital, clinic, and physician's reports, and poison information centers.
- Epidemiological reports collected by public health nurses, sanitarians, or others as a special project.[8]

Measuring Effectiveness

Home accident prevention programs are not uniform; they vary with the nature of the problem and the staff available. Therefore, the following suggestions need to be adapted accordingly.

Many of the items suggested for use in evaluation need not be collected and analyzed continuously. Periodic studies, especially of newly developed programs, are a valuable aid to program evaluation and revision.

Evaluation of home accident prevention programs has two major aspects:

- Evaluation of the entire program in relation to the long-range objectives.
- Evaluation of specific activities and services of the program in relation to the immediate objectives.

To be of maximum value, evaluation should be performed periodically. It should be followed by reexamination of the program in terms of both immediate and long-range objectives. Unsatisfactory progress indicates a need to replan the program and possibly to redefine objectives.[9]

Long-Term Effect of Community Program

Collection and analysis of the following data may help gauge the effectiveness of an accident prevention program in achieving its ultimate goal:

- Trend of death rates from home accidents with respect to such factors as manner of injury, object involved, age, race, and sex.
- Indexes of change in nonfatal injuries by data from hospitals, emergency rooms, or, in some cases, from area surveys.

Caution must be used in drawing conclusions from the data. Evidence of change within a given area should not in itself be considered an adequate measure of the program's effectiveness. Comparisons with changes in a comparable area that does not have a preventive program help to strengthen the evidence regarding the effect of the program.

Effect of Health Department Services

A record of the number of activities, the time spent on them, and whatever measurable work is done does not necessarily indicate the health department's contribution to a communitywide program. It is necessary to supplement the records of the number of activities by some study of the content of the services and the extent to which they have accomplished their purpose.

Staff orientation and inservice training

Measurable activities in staff training might include a series of lectures and demonstrations for local health department staffs by persons with special competence in home accident prevention. Material presented would include current statistics indicating the problem and reasons for integrating home accident activities with all public health work. This might be preceded and followed by written tests and field practice to determine the information level of the staff. Orientation of the staff to the use of techniques in reducing home accidents would be a part of this inservice training.

Public education activities

Public education by health authorities would include classes, lectures,

Service Statistics Series

A series of documents on the collection, analysis, and interpretation of service statistics for various health department programs is being developed by the Working Group on Service Programs, Public Health Conference on Records and Statistics.

* * * * *

In developing this . . . report, which is a guide to statistical services in the planning, administration, and evaluation of public health services in home accident prevention, the working group had the assistance of several consultants with especial experience in programs for the prevention of home accidents.

This report was approved by the conference membership in the autumn of 1956. It was reproduced in mimeographed form as attachment A to document 370 by the National Office of Vital Statistics, Public Health Service, Department of Health, Education, and Welfare, Washington, D. C. It has the endorsement of the Statistics Section and the Committee on Administrative Practice of the American Public Health Association, the National Safety Council, and the Council of State Directors of Public Health Nursing.

exhibits, radio programs, and printed matter. This is a difficult area for which to establish objective indexes of accomplishment. However, a few suggestions for gauging increased knowledge and change in habit patterns might be measured by before and after quizzes, the use of checklists, and by counting requests for services and materials. Records of the number of requests will be more meaningful if they include a study of the characteristics of the groups being reached, with age, sex, and occupation indicated.

Because allied agencies are active in the educational phase of home accident prevention, it is difficult to pinpoint the effectiveness of health department work per se.[10] The most valid study of the effect of materials used through mass media (radio, television, posters, pamphlets) might be made by the national agencies that develop the material.[11-12] Results of such evaluation should be available to local health departments for use in determining the educational medium to be used.

Another indication of the value of health department activities is in the number of second requests for speakers, literature, and consultation. This, of course, measures only requests for assistance, not the effect of it.

Specific services to individuals and groups

Recording of hazards, dangerous practices, and their correction (or continuation) may be included in activity reports, either routinely or by special arrangement. These records will provide evidence of home accident prevention services given to individuals or groups. To stimulate the correction of hazards, a health worker may distribute, for example, calendars for recording home accidents[13] or Christmas tree tags with fire prevention instructions. He measures the effectiveness of these activities by counting the number of homes in which the calendars or tags are used. The number may not be the same as that of the homes to which the materials were sent.

Services to groups include such activities as lectures, program guidance, and panel participation.

The amount of time devoted by public health personnel in teaching home accident prevention should be measured for a short period. For example, periodic spot checks of the accident prevention content of the records of nurses and sanitarians may prove useful.

Records which need not be kept continuously but would prove valuable over a selected period of time concern referrals of individuals to specialized services and corrections effected. Suggested as examples are referrals of persons to clinics or private physicians because of poor vision or other physical handicaps, including congenital malformations and emotional disturbances.

A record of referrals and cooperative effort between groups active in home accident prevention adds meaningful evaluative information. The next logical step is the recording of the followup activities and their results. Records of referrals of environmental hazards may be those to:

- Gas companies for checking and correcting leakage, inadequate venting, or faulty operation.
- Electric companies for overloading, faulty equipment, or short circuits.
- Other fuel suppliers for inspection and correction of oil or coal furnaces and heaters.
- Municipal fire department for testing extinguishers, advice in correcting fire hazards.
- Municipal building department for advice in correcting structural defects.
- Manufacturers of household equipment, appliances, and furnishings.

Builders and contractors are among other groups offering a field for activity. In connection with new housing site inspections, recommendations for safe building and the number actually carried out provide a clue to the effectiveness of this field of work.[14]

Studies

The 8 State and 4 local demonstration programs in home accident prevention, sponsored by grants from the W. K. Kellogg Foundation, have had accelerated experience in this field which may provide resources on special studies and service statistics.[15] Baseline values of morbidity and mortality, activity counts, and service statistics of program activities were obtained by various methods in these demonstration programs. For additional reference and further information, health officers of the following departments of the directors of the home accident prevention programs may be contacted: local health departments — Cambridge (Mass.), Mansfield (Ohio), San Jose (Calif.), Kalamazoo (Mich.); State health departments—California, Georgia, Kansas, Kentucky, Maryland, Massachusetts, North Carolina, Oregon.

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Ro.S.P.A.'s Problems

By Maj. Gen. B. K. Young, C.B.E., M.C.

Director-General
The Royal Society for the Prevention of Accidents
London, England

MAJOR-GENERAL Young described some of the problems of the Royal Society for the Prevention of Accidents in this lecture entitled "Home Safety" presented to the Royal Society of Arts, London, England, on December 5, 1956.

INTRODUCTION

ON SEVERAL previous occasions oddly enough at two-yearly intervals, the Royal Society of Arts has listened to papers on various aspects of the accident prevention problem. In 1950 the three Cantor Lectures, given by Dr. W. H. Glanville, dealt with "Road Safety and Road Research." In 1952 the Shaw Lecture on "Industrial Accidents" was given by H. R. Payne, and in May 1954 the three Cantor Lectures were given on "Safety on the Road," by Dr. W. H. Glanville; "Safety in the Air," by Air Commodore Sir Vernon Brown; and "Safety on the Railways," by Lieut.-Col. G. R. S. Wilson.

Today, in 1956, your society is kind enough to welcome another paper on—perhaps the most difficult of all forms of accident prevention—the prevention of accidents in the home. I wonder if in 1958 you will ask us to present a paper on our latest accident prevention baby, agricultural safety?

For the past 25 years, the Royal Society for the Prevention of Accidents (Ro.S.P.A.) has been the pioneer in home safety work; in the early days it was a tough and uphill task to break down public apathy and to spread knowledge of the extent and consequence of home accidents, but increasing publicity and the interest taken by many local authorities, together with a large number of voluntary organizations, has brought about an increasing awareness of the problem; home safety is, at last, becoming a matter of widespread concern; the national conscience is being stirred.

The home accident problem in relation to all accidents.—The annual death rate from all accident causes amounts to nearly 18,000 fatalities; very many more suffer severe and, in many cases, permanent injury or disfigurement, and a totally unknown number of millions suffer minor injury. To this suffering must be added the economic cost and wastage that all these accidents cause the nation. The accident prevention problem is formidable. Table I gives the primary breakdown and indicates the main fields in which accident prevention is required.

Unexpectedly perhaps, in the 3 vocations or employments normally looked upon as hazardous there occurs the lowest daily average of accident fatalities, namely, 1 each on the railways, in air and water transport, and in coal mines—yet look at the headlines in the press when such accidents occur. Can you recollect any such national publicity about home accidents, of which the daily average is as high as 17?

Consider the two-a-day in factories. Professor Chester, of the University of Manchester, pointed out that during the first 6 months of 1955 strikes in this country *had cost* 2,795,000 working days, or more than the whole loss for any year since 1945. With no newspapers and no trains, the impact of the stoppages was brought into every home. It was not surprising, therefore, that the people experienced a considerable shock and that demands were voiced for immediate and drastic action by the Government. Let us put against that figure another given by Sir Walter Monckton, when Minister of Labor, to the effect that nearly twenty million working days are lost every year in industry through injuries and occupational diseases. This loss is some seven times that referred to as due to strikes, yet it is the latter—the lower figure—which makes headline news, not the twenty millions due to accidents. This illustrates so well the difficulties of the safety worker.

Much is being done, and a great deal has already been accomplished in the way of accident prevention in these particular fields. Much money is being spent on this worthwhile work, and a vast amount of time, thought, research, and effort is being expended. Results are being achieved.

Let us be frank and face facts. Very little, in comparison with other fields of accident prevention, is being done about, or spent on, home accident prevention. The purpose of this paper is to pose two questions:

Why is so little being done about home safety?

How can more be initiated and the intensity increased?

Remember, 17 a day die by reason of an accident in their home—*surely* that should shock the people?

At present, except for fatalities, no system exists for the accurate recording of home accidents, but a conservative estimate, based on sample hospital returns, shows that probably every year 60,000 to 70,000 home accident cases receive inpatient hospital treatment, and over one million receive outpatient hospital treatment, while many other minor injuries are treated by district nurses, health visitors, and first aid workers.

A further estimate shows that the treatment of these home accident cases involves at least 1½ million hospital-days each year, a fact indicative of the severe strain placed on hospitals and nursing services by home accident casualties.

HOME ACCIDENTS

The victims.—Home accidents can, and do, happen to people of all ages, but examination of the figures [in table II] shows that two age-groups are particularly vulnerable; the children under 5 years of age and the elderly age-group—those of 65 and upwards.

These figures show quite clearly the relationship of age and sex incidence to place incidence: those who spend most of their time in the home

(those under 5 years of age and those over 64 years of age) being more liable to home accidents than those whose time is spent between home, work, or school and daily travel between these two points. Women, who naturally spend more time in the home than men, are more liable to home accidents than are men. While all fatal and serious accidents present a problem of national health and well-being, two particular problems are suggested by these figures: that of the preschool child who suffers serious and often permanent injury through home accidents and who creates special problems of education and employment later on, and the equally serious problem of providing hospital or institutional care for the elderly who are permanently incapacitated through accidents and who are no longer able to care for themselves or to be looked after in their own homes.

Types of home accidents.—Year by year home accidents fall into four main categories: falls, burns and scalds, poisoning, and suffocation. Table III shows the way in which these accidents are related to the various age groups.

Home accident causes.—Information given at inquests and investigations into home accidents generally suggests that in broad terms some of the causes may lie in the changing pattern of social life.

First is the large and increasing number of married women, over 3,370,000, who are employed outside their homes; this may lead to overfatigue and does lead to less supervision of the home, particularly during school holidays.

Secondly, the increasing longevity of the population, which brings an increasing number of people into the most vulnerable group.

Thirdly, the increased mechanization of the home through many new labor-saving gadgets and devices, which may also bring increased risk of accidents through misuse or lack of understanding, coupled with the many new synthetic fabrics now being made, some of which are of a highly flammable nature.

Fourthly, the high cost of living, which may cause delay in attending to faulty appliances, and which may also create conditions of overcrowding in homes in the lower income groups—overcrowding being a known factor in home accidents.

TABLE I. IN GREAT BRITAIN, ON AN AVERAGE, EVERY DAY 45 PEOPLE DIE AS A RESULT OF ACCIDENTS*

14 on the roads ... 1 on the railways ... 1 in air and water transport	*i.e.* 16 in some form of travel
2 in factories ... 1 in coal mines ... 2 in farms, quarries, etc	*i.e.* 5 in places of work
17 inside the home ... 7 in everyday pursuits	*i.e.* 24 in and around the home

The two main factors.—In all work in accident prevention, it is accepted that there are two factors which underlie all accidents: a human and an environmental factor. The human factor covers the physical state of the victim, conditions of disease or infirmity which produce liability to accidents, for example, poor sight, impaired senses, stiffness due to rheumatism or arthritis, epilepsy, malignancy, and diabetes. The psychological aspect of the human factor includes inexperience, carelessness, recklessness, absentmindedness in the elderly, and the negligence of others as well as of the victim.

The environmental factor includes dangers due to bad design and maintenance of the fabric of the house; faults in facilities provided for washing, cooking, and heating; the choice and arrangement of the furniture; the design of, or misuse of, domestic equipment and appliances; and inadequate lighting. To this can be added nowadays the work of the ardent amateur with his or her "Do it yourself" equipment.

Prevention of Home Accidents

Safety organization.—In the Shaw Lecture on "Industrial Accidents" given here in 1952, organizing for safety was described as being of three stages, the third of which had most certainly not yet been reached. The three stages were something on these lines: a survey of the raw problem followed by a general and elementary program of publicity, education, and tidying up; the natural development of this program into a planned course of action, proper safety training, increased influence of safety committees, and a special service of propaganda, publicity, and safety education; the acceptance *by all* of the correct approach to all these problems, when the need for a special safety organization and safety officers will cease.

In short, a good safety organization works on the basis of making itself eventually redundant—a regrettably distant target.

The raw problem in home safety.—In surveying the raw problem of home accidents many questions arise. Why do they happen? To whom do they happen? Where do they happen? When do they happen, and, above all, need they happen? Most of the questions have been answered already. They happen through human ignorance or carelessness, through unappreciated dangers in the environment; they happen chiefly to the elderly and the very young; some parts of the house, notably the kitchen and staircase, are particularly dangerous; and they tend to happen at the rush periods of the day. But can they be prevented? Results in other fields of accident prevention suggest that prevention of home accidents is, in fact, possible (table IV).

Before a really effective campaign can be instituted, it is essential to obtain the fullest possible informa-

*All fatality figures quoted in this paper refer to England, Scotland, and Wales and are taken from the Annual figures published by the Registrars—General for England and Wales, and Scotland, respectively.

TABLE II. FATAL ACCIDENTS, 1954

Children under 5 years	890	11%
Children 5–14 years	120	2%
Adults 15–44 years	450	6%
Adults 45–64 years	851	11%
Adults 65 and upwards	5,412	70%
Total number of deaths	7,723	100%
Male deaths	2,924	
Female deaths	4,799	

tion regarding home accidents. Only full and readily available statistics can provide the essential background and point the various targets to be aimed at. Without them the safety worker cannot keep abreast of changing trends. While home accident fatality figures are obtainable, there is often considerable delay in publishing them—today, for instance, in the last month of 1956, figures for 1954 must be quoted since those for 1955 are not yet to hand!

Equally great is the need, which has not yet been met, for accurate figures of nonfatal accidents, both local and national, so that those working in accident prevention can have as full and complete a picture as possible of the entire problem. Indeed, these figures are essential if the changing trends in the accident pattern are to be known and countered.

The three E's of accident prevention.—These three E's are internationally accepted; Education, Engineering and Enforcement apply to accident prevention work in the home no less than on the road or in the factory. It is Ro.S.P.A.'s policy to undertake education in its widest sense and to cooperate with, but leave to those better fitted to undertake them, the tasks of engineering and enforcement. Education includes both training and propaganda, using all the media available and for which funds can be found.

Engineering or scientific problems which are met with render technical advice essential; in this the willing and helpful cooperation of the Home Office is greatly valued, as well as that of the British Standards Institution, the Department of Scientific and Industrial Research, leading organizations dealing with gas, electricity, and the use of solid fuel, the fire services, and many others.

Enforcement presents a more difficult problem. To date, home safety legislation has been limited to the Children and Young Persons (Amendment) Act 1952 and the Heating Appliances (Fireguards) Act 1953. Nevertheless, the Englishman's home is still his castle; the enforcement of preventive measures must imply some measure of inspection which would undoubtedly be unpopular and, in many cases, cause resentment and opposition—a very different position from that pertaining in industry with the Factories Acts.

The Home Safety Campaign

The need for measures to combat accidents in the home was first recognized by Ro.S.P.A. in December 1931 when a conference of women's organizations met and passed the following resolutions:

> That it is desirable that women should take an active part in the prevention of all kinds of accidents, particularly those involving children and those occurring in home and everyday pursuits.
>
> That the appropriate women's organizations and organizations for promoting the welfare of children be invited to cooperate by forming a joint committee in the form of a Women's 'Accident Prevention' Council with the object of investigating causes of home accidents and means of prevention, advising as to suitable propaganda, lecture notes, etc., encouraging women's organizations to include, where possible, accident prevention within the scope of their own activities and other similar measures.

Cooperation was the keynote from the start, and following this meeting some 52 organizations were approached and invited to appoint representatives of either sex to serve on this proposed council. The first meeting was in February 1932. In this way the National Home Safety Committee of Ro.S.P.A. came into being, to be followed in the same year by the formation of local home safety committees in Leeds and Sheffield.

Statistics were collected, thus pinpointing the major causes and chief victims of home accidents, and on these facts the propaganda measures of Ro.S.P.A. were based. From the start, a two-pronged drive against home accidents was initiated, one directed towards educating the public to realize dangers in the home, the other towards the improvement of environmental conditions and safe standards of domestic design. These activities, accompanied by the gradual increase in the number of local home safety committees, were carried on with increasing success from 1932 until the advent of the Second World War, when activities were temporarily curtailed.

Postwar progress.—In 1941 Ro.S.P.A. began to turn its attention to postwar plans, and the means of obtaining funds to carry on an increasingly widespread home safety campaign. In 1948 the Home Office agreed to make Ro.S.P.A. a small grant-in-aid for a limited period to assist in the expansion of this work. As a result, Ro.S.P.A. set up a small department to deal specifically with home safety matters. This grant is, unfortunately, only of a temporary nature, but a basic fixed income as a firm foundation is essential if planning and expansion of the work is to proceed.

Since 1948 Ro.S.P.A.'s activities have continued to grow, and there are now 80 local home safety committees affiliated to it, each carrying on the local campaign in their own areas. They receive as a quarterly service our *Planning Guide* and our *Home Safety Bulletin,* as well as annual statistics upon which to base their own local home safety campaigns. The *Planning Guide* contains sample educational and propaganda material, being an extension

of the method so successfully adopted in our road safety work.

The National Home Safety Committee, to which the Home Office sends an observer, meets quarterly and deals with many matters pertaining to accident prevention. Information relating to environmental causes of accidents has led to the study of such factors as housing design; the safe use of gas, electricity, and solid fuel; fireguard design; flammable fabrics; the banning of unsafe toys; and improvements in the design of children's cots, prams, chairs, and harness.

The press, both nationally and locally, has given valuable help, while many articles (or information for articles) are supplied every year to publications, varying from women's magazines and nursing and medical journals to tenant's handbooks. A very close and happy relationship has always existed between the safety movement and the BBC and more recently commercial television; a number of sound and television programs have been arranged from time to time. Despite this increasing interest and extension of knowledge on the subject of home accidents, however, the annual toll continues to be high and far more extensive work will have to be undertaken to reduce the high rate of home accidents both speedily and substantially.

The Home Office Standing Interdepartmental Committee.—In 1947 the Home Office set up a Standing Interdepartmental Committee on Accidents in the Home, on which 13 Government departments were represented. A representative of Ro.S.P.A. attends its meetings and so ensures a close liaison. Other departments not represented on the committee are consulted when necessary. In 1953 the committee published a most interesting and informative report on the subject of accidents in the home; the following very valuable comments come from the second paragraph of that report:

> During the past five years the Committee has been able to gather together much information about the nature, extent and cost of home accidents which has not previously been available in a convenient form. This information has been of great value to the Committee, both in providing a general picture of the scope of the problem, and in focusing attention on particular hazards. It also confirms the view which the Committee formed at an early stage of their work that the two most important causes of accidents in the home are faulty design and equipment and, in the broadest sense, human frailty; and that of the two, it is the human element—ignorance, carelessness and physical disability—that is the more important.

The position today.—Today the home safety movement has, to a reasonable degree, achieved that elementary program of publicity, of education of professionally interested bodies, and of a general tidying up of effort which was referred to earlier in this paper. What is needed now is the second part of the program: the study of the technical needs of the home, universal education in home safety as part of the training of the homemaker, a rapid increase in the number of local home safety committees able to render specialized service through continual local propaganda and publicity, and the study of local home accidents in relation to local conditions and patterns of living. In this way the practical work of promoting safety in some 14½ million homes can be carried on.

Developing the Home Safety Program

Technical.—The technical needs of the home in relation to safety include such diverse problems as improved design of houses, especially in relation to the housing of the aging section of the community; more consideration being given to efficient working layouts in kitchens which will reduce fatigue and eliminate accident risks; and the guarantee of technical safety in all heating, cooking, and washing appliances and, indeed, in all forms of gas, oil, solid fuel, and electric equipment. Protection of the consumer against faulty goods and better standards of safety design in all forms of domestic equipment and utensils can, and must, be achieved, and a careful study should be made of all new developments in household cleaning agents and synthetic fabrics to insure that any dangerous properties can be recognized and controlled. These matters are the constant concern of Ro.S.P.A. and those other organizations represented on its National Home Safety Committee, namely, the Home Office Standing Interdepartmental Committee, the British Standards Institution, the Gas Council, the British Electrical Development Association, and the Women's Advisory Council on Solid Fuel.

It is encouraging to note that some local authorities are paying attention to the need for special forms of housing accommodation for the aging, and also to the provision of fireguards and fixtures in their housing schemes.

Educational.—The second need, of universal education in home safety as part of the training of the homemaker, is a vast and complex problem, but it is, in part, being carried on by district nurses and health visitors who have access to individual homes, through welfare centers and clinics, and by workers in the field of old people's welfare, both statutory and voluntary. It is encouraging, too, that the voluntary organizations like the British Red Cross Society and the St. John Ambulance

TABLE III. ACCIDENT INCIDENCE (FATALITIES) 1954

Type	*Percentage*	*Chief victims*
Falls	61%	65s and upwards
Poisoning	14%	45s and upwards
Burns and scalds ...	11%	65s and upwards and under 5s
Suffocation	10%	Under 5s
Miscellaneous ...	4%	65s and upwards
TOTAL ...	100%	

TABLE IV. REDUCTION IN FATAL ACCIDENTS 1954 COMPARED WITH 1935

Fatalities	*% Reduction*
On the roads	23%
On the railways	36%
In the factory	19%
Mining industry	54%
Drowning	37%

Brigade, include home safety training in their junior and adult courses.

Educational bodies, too, are realizing the need for, and opportunities of, including home safety training for young people in schools and colleges, largely through the domestic science, home craft, and mother craft classes, while many training college students have recently made accident prevention the subject of a thesis on various aspects of social studies. Parent-Teacher Associations are also showing concern for the home accident problem. This development augurs well for the coming generation of housewives and mothers, but there is so much need for continual and increasing development along these lines.

More local activities.—In the road safety campaign invaluable service has been rendered by local road safety committees, of which there are now at least 1,000; but the increase of local home safety committees has lagged behind largely from lack of funds. There is a great need in every area for a body of informed opinion to study the local home accident problem and to interpret the national campaign in effective local terms. Conditions vary immensely from one area to another. Ro.S.P.A. strives continually to provide the inspiration and incentive for local health authorities and local home safety committees, but must inevitably rely on local efforts to augment and carry on activities on their own home ground. It is only through a central organization's undertaking the investigations and inquiries on a large scale, in cooperation with central Government bodies, and by using local authorities and interested organizations to apply these findings on a local level, that this campaign to reduce the terrible toll of human life and suffering can be carried on.

Existing local home safety committees now number 80, and that number is slowly but surely increasing; it would increase more rapidly with adequate financial and moral support. Great tribute must be paid to the work of these committees, whose efforts reflect the enthusiasm and initiative of volunteers aware of the urgency of the problem and willing to give generously of their time and energy in this vital task. Many committees began, and still do begin, by raising funds themselves to carry on their work until such time as the value of their work is recognized and a grant made from local authority sources.

Under existing legislation, the medical officer of health has full powers to undertake this work under the National Health Service Act 1946, Section 28, and the Local Government Act 1948, Section 136. These acts enable local health authorities, with the approval of the Minister, to contribute to any voluntary organization formed for the purpose of the prevention of illness within the area of that authority. Each local committee finds its own most useful sphere of action and is usually made up of the medical officer of health, the chief constable, representatives of nursing and health visiting services, the gas and electricity boards, the fire service, the local education authority, and members of many voluntary organizations. Activities are many and varied, and include the collection of local accident statistics; publicizing information in the press; lecturing; arranging displays, exhibitions, and film shows; distributing propaganda material; renting or providing fireguards; and generally promoting and expanding the work of home accident prevention in that locality.

Conclusion

Nineteen hundred fifty-six has seen two landmarks in our work of accident prevention in the home. The first has been the creation of an all-party home safety group in the House of Commons, with Dr. D. McI. Johnson and Hilary Marquand as joint chairmen. This excellent move has been made possible by the work of two women M.P.'s, one a vice president of the society, namely, Mrs. Jean Mann, and the other Mrs. Patricia McLaughlin. This is indeed a splendid and helpful recognition of the value and, indeed, urgency of home safety work.

All will agree that the second landmark has been reached today. Accident prevention is indeed an art, an exceedingly difficult one too, particularly when it concerns our own homes. All who work for home safety, in particular Ro.S.P.A. and its hardworking and enthusiastic National Home Safety Committee, will join in saying thank you to the Royal Society of Arts for providing this opportunity and this platform and by so doing showing its official recognition of this particular field of accident prevention.

Need for Research

(from page 9)

havior to keep children from entering refrigerators.

This does not mean that a wholesale program of research, such as one directed at housing design for maximum safety, would not be a profitable undertaking. On the contrary the elimination of hazards by efficient planning design and construction of homes and the control of hazards associated with the construction and installation of household appliances and equipment are of highest priority. It is rather futile to tell householders about even treads, standard risers, etc., when they buy or rent their homes after they are built. Research into the design of homes for maximum safety is a vital need. A particularly acute need is the design of homes for the elderly.

As I see it, the difference between the epidemiological research we are proposing for home accidents and that ordinarily applied in public health is that in the former case we are dealing with a whole spectrum of events and causes. Each innovation brings new ways of injuring, maiming, and killing. The introduction of the tranquilizing drugs immediately presented new opportunities for childhood poisoning and other accidents; the rotary

(to next page)

THE FLIBBERTYS
WHEW! THIS ICE IS SLIPPERY.
I'LL BE LUCKY IF I DON'T BREAK MY NECK BEFORE I GET HOME.
HOME AT LAST! SAFE AND SOUND.
FLOOR WAX
1-21
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Need for Research

(from page 31)

mower brought new opportunities for cutting off toes and putting out eyes. We have, therefore, to carry out a two-edged research program—general and specific.

The general approach is now in public health. To my knowledge, there has not been conducted an epidemiological investigation into "illness" as such, although yellow fever, malaria, tuberculosis, syphilis, and the like have been studied, and the causative agents, isolated. Cuts are not caused by a single agent, but rather by an ever-changing gamut of events, from slipped nail files to crashes of huge airliners. Anyone who has looked at the results of a home injury survey or reviewed the certificates of deaths from accidents must be impressed with the almost infinite variety of ways people are accidentally hurt. Therefore, we must try to identify the common causes of most accidents as well as the specific causes of some accidents.

Our epidemiological research will become more specific as sufficient numbers of accidents with common causes are identified. When we learn that power mowers are cutting off toes, we must proceed to try to do something about it as the State of Georgia has done. If children are being burned by falling in fires, we must introduce a program of fire screens, and so on. But all the time we must work toward the goal of identifying common causes—the effect of weather, climate, topography, training, education, personal factors, fatigue, drugs and alcohol, housing design, and the like. Otherwise we shall find ourselves just plugging holes, while other holes appear as fast as the economy and technology advance.

I should like to end with a quotation from the *Daily Tribune* of Gallipolis, Ohio, which, while it does not apply to home accidents, illustrates the point I have attempted to make: "The number of serious . . . accidents is appalling. Fractured skulls, broken limbs, mutilated faces, scalps and ears torn off, and spines crippled are the daily record. And almost without exception every accident is the result of fast and reckless . . ."—the year was 1897—the agent was the bicycle!

Scout Safety Project Book

Live for Tomorrow, the official Boy Scout Safety Good Turn project book, was to be ready for distribution about November 1, according to Boy Scouts of America officials.

The book, prepared for the Scouts' year-long emphasis on safety during 1958, will be used by Scouts and Scout leaders to carry out a number of specific safety projects.

Three main areas of safety interest get special attention in the publication: traffic (March, April, and May); outdoor (June, July, and August); home (September, October, and November), and winter and holiday (December).

The chapter on traffic includes the following sections: "Safe Passengers," "Safe Pedestrians," "Safe Cyclists," and "Safe Drivers."

The second chapter, dealing with home, farm, and ranch safety, includes sections on falls, burns and scalds, and poisoning.

Material on water safety takes up safe swimming and small craft, while the chapter on fire safety provides information on home fire hazards and fire safety outdoors. A separate chapter deals with gun safety.

Accompanying each chapter is a list of agencies and resources which may be consulted for additional safety information as well as a list of specific safety projects for the Boy Scouts.

Already distributed to Scout and safety leaders is a council guidebook designed to inform leaders of the Safety Good Turn project. A new safety merit badge manual is being prepared and will be available about January 15, 1958.

ON THE CALENDAR

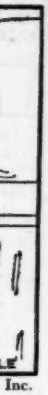
May 5, 6, 7, 1958; Allentown, Bethlehem, Easton, Pa.

Thirty-First Annual Eastern Pennsylvania Safety Conference. Contact: Harold A. Seward, Lehigh Valley Safety Council, 602 East Third Street, Bethlehem, Pa.

October 20-24, 1958; Chicago, Ill.

46th National Safety Congress & Exposition. Contact: R. L. Forney, secretary, National Safety Council.

Stock No. 511.03—117



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